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LAND FORCE

# TRAINING CANADA'S ARMY

## (ENGLISH)

**(Supercedes B-GL-304-001/PT-001, 1992-11-12.)**

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# FOREWORD

1. B-GL-300-008/FP-001 *Training Canada's Army* is issued on the authority of the Chief of the Land Staff.

2. This publication is effective upon receipt and supercedes B-GL-304-001/PT-001 *Training for War*.

3. The French version of this publication is B-GL-300-008/FP-002 *L'instruction de l'Armée de terre du Canada*.

4. Suggested amendments should be forwarded through normal channels to the Directorate of Army Training (DAT) of the Land Force Doctrine and Training System (LFDTS).

5. Unless otherwise noted, masculine pronouns contained herein refer to both genders.

6. This publication is available electronically at http://lfdts.army.mil.ca/ael/publications.asp on the Defence Information Network (DIN) or at www.army.dnd.ca/ael on the World Wide Web.

## PREFACE

1. The aim of this publication is to state the philosophy, principles and processes that guide the new approach to Army training.

2. Apart from operations, training is the most important activity of an army. Success or failure in operations is largely dependent upon the way an army plans and conducts its training. The current security environment demands of Canada's Army two distinct training requirements: it must plan and conduct training in preparation for ongoing operations, and it must plan and conduct training that will ensure preparedness for future war. The first requirement responds to the realities of ongoing commitments, whereas the second addresses the need for the long-term institutional health of the Army. Both are sacrosanct.

3. Over the course of the 1990s the training focus of Canada's Army has narrowed steadily toward current operations. Skills at brigade and combined arms battle group level have eroded, and collective training as a whole has centred around pre-deployment training events. There have been no commonly applied standards, and few training events have caused the Army to reconsider or change its doctrine. The Army has failed to make maximum use of training to facilitate learning. At the same time, our individual training system—while delivering excellent training—has become very inefficient and unsustainable.

4. *Training Canada's Army* attempts to correct these imbalances and provides direction regarding the evolving individual and collective training systems. It seeks to identify the exact role of Army training in force generation and operational readiness. It describes the manner in which the Army will manage readiness through a balanced apportionment of tasks and resources. It also articulates how the Army will facilitate both training for current operations and training for war.

5. The doctrine herein utilizes the Army's Systems Approach to Training (ASAT). The ASAT methodology is applied to both individual and collective training to create distinct but connected systems. These systems are also integrated with the emerging Army Professional Development model. Together, these systems support Army operational readiness, adding coherence and efficiency to current Army training practices.

6. Two themes are prevalent throughout this publication. The first is that training is command-driven. Commanders design training that best ensures the formation of highly cohesive and combat ready tactical groupings. Commanders at all levels also have a duty to manage the professional development of their individual subordinates. Professional development is a career-long process of education, training and employment experience. The education and training of subordinates, using individual, collective and continuation training opportunities, is the foundation upon which a commander builds cohesion and combat readiness. It is essential that commanders are involved in all aspects of Army training, and this publication addresses command responsibilities in this regard.

7. A second prevailing theme is that training must be systematic. Management of the individual and the collective training systems requires a degree of centralization and prescription. The Chief of the Land Staff uses the Army's Strategic Operations and Resource Direction

(SORD) to prescribe a training focus for subordinate commands. Subordinate commanders use the prescriptions of the SORD when articulating their own training intent. With higher headquarters providing the training focus and controlling training resources, it is possible for the Army to meet both the requirements of operational readiness for current missions and the maintenance of a general war fighting capability in the Army as a whole. Meeting these requirements will effect unity and consistency of purpose from the strategic to the tactical level and the sustainment of high standards over time. To this end, all Army commanders have a supporting role in the individual training system and an active role in the collective training system. This publication describes these evolving systems.

8. The systems discipline presented in this document is also designed to provide for effective learning from training. Learning for those participating in training will come from mandatory use of the After Action Review (AAR) in all training events. Institutional learning will be effected through a revamped post exercise reporting process, which will be integrated into the Army's combat development processes. Commanders at all levels will play a critical role in establishing a learning culture in the Army.

9. Reserve Force training issues are covered in every chapter of this publication. However, at the time of publication, the Land Force Reserve Restructure (LFRR) had not evolved to the point where a comprehensive treatment of reserve training was workable. Yet, as much as possible, the doctrine of B-GL-300-008/FP-001 is designed to facilitate incorporation of emerging Reserve Force roles and helps to situate the place of the Reserves in force generation.

10. *Training Canada's Army* is the Army's doctrine for training. Adjustments to training doctrine must be treated in a manner similar to changes in the Army's tactical doctrine: through deliberation and conscious decisions made at the appropriate command levels, ultimately requiring approval from the Army's senior leadership.

11. This publication articulates the Army Training philosophy. It is a guide for the commanders, trainers and instructors who are responsible for creating the appropriate learning environment that is vital to the development of professional and well trained individuals, units and formations, and to a professional and progressive Army. Readers are encouraged to begin the process of training reformation needed to realize the training philosophy and standards articulated herein.

J. Arp
Major-General
Commander
Land Force Doctrine and Training System

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# CHAPTER 1
# THE AIM AND PURPOSE OF TRAINING

> *Training is the process that forges soldiers, materiel and time into combat ready units and formations. Such a process requires an effective, efficient Army training system that produces the combat capability and readiness outputs for all elements of the force, as defined in the Defence Planning Guidance.*
>
> **—Land Force Strategic Direction and Guidance 98, Chapter 6, page 2**

## SECTION 1
## INTRODUCTION

1. This publication describes how Canada's Army should train for war. It is the primary training reference for use in the Army and contains those elements of training philosophy and strategy necessary for understanding how to train soldiers. The intended audience spans the rank spectrum from junior leaders to senior commanders, including essentially anyone who is a commander or in any way involved in the planning and conduct of training. However, most of the concepts herein pertain to, and are the responsibility of, Land Force Area and brigade commanders, unit commanding officers, and school and college commandants.

2. While B-GL-300-008/FP-001 is the primary guide to training matters, policy statements that are issued by the chain of command and that proscribe or prescribe particular training activities may supplement it. Therefore, training concepts of this publication are to be read in the context of current policy guidance and direction.

3. There are two central themes in this publication. The first is that the functions of training and command are inextricably connected. It is the duty of commanders to train their personnel and of units to successfully execute the tasks that have been assigned. Commanders must use training to generate a common understanding throughout their units of their intent regarding how operational missions will be conducted. Therefore, commanders must have mastery of the concepts covered in B-GL-300-003/FP-000 Land Force, *Command*, which should be read and understood in conjunction with this manual. The second theme of this publication is that the Army must maintain a systematic approach to training, integrating professional development, individual and collective training, and employment experience to meet the operational requirements defined in the Strategic Operations and Resource Direction (SORD) and to maintain combat capable soldiers and units. The systems approach to training will designate main efforts for training, providing focus and ensuring training resources are not squandered. At the same time, it will ensure unity and consistency of purpose from the strategic to the tactical levels. For these reasons, all training in the Army will fall within the jurisdiction of the Commander Land Force Doctrine and Training System (LFDTS), who will provide direction for the execution of Army training. The two themes of this publication are to be regarded as complementary aspects of the Army's training systems.

## SECTION 2
## THE ARMY TRAINING SYSTEMS

4. The Army has an individual training system and a collective training system. Both include processes that use time and resources to train soldiers to specified standards. Together, these systems forge qualified soldiers and leaders into cohesive, combat-ready units and formations. The systems also function to maintain high standards of training throughout the Army over time. They are responsive to the intent of higher commanders, which ultimately derive from direction provided by the Chief of the Land Staff (CLS) in the SORD, yet are protective of core war fighting skills. The systems are structured by the use of formal plans, including course training plans, unit training and business plans, and exercise instructions. The systems are given focus and guidance by the application of doctrine and formal training standards (qualification standards and battle task standards). The systems are self-adjusting by use of validation, the after-action review, and the Army lessons learned mechanisms (involving post-exercise and post-operation reports). All commanders who have been assigned tasks in the SORD must utilize the Army's training systems. In order to do so, they require vision, creativeness and the clear articulation of their intent for training to their subordinates. The training systems are dependent on command participation.

## SECTION 3
## TRAINING PHILOSOPHY

5. In war, commanders and their staffs consider the relationship between the available time, space, forces and resources (friendly and enemy) through intelligence preparation of the battlefield in order to determine the best sequence of actions to fulfil a higher purpose—a higher commander's intent. The result of this estimate is presented in operations orders. In training for war, this commander/staff responsibility remains the same. Training demands detailed consideration of available time, resources (including training space) and troops in order to determine the best way to conduct individual and collective training to fulfil a higher commander's intent. The commander/staff training estimate will produce training plans that will, in turn, provide guidance to subordinate commanders for the planning and conduct of their own training. Training responsibilities are devolved along with training resources; but activities at all subordinate levels are disciplined by a common understanding of the higher purpose of the training and are consistent in the application of common doctrine and centrally managed training standards.

6. The training systems are designed to induce a shared understanding of tactics, techniques and procedures (TTPs) and to allow practice of these TTPs. Training within the systems will also impart a common Army ethos and values, which, together with a uniform set of standards and an identification with a single purpose, will create mutual understanding, trust and cohesion. While commanders play a creative role in the design of training and a critical leadership role in the conduct and confirmation of training, their influence is balanced by the institutional requirement for commonality of doctrine and standards and shared Army values. All of these institutional requirements come together in the training systems to create unit cohesion—the centre of gravity of Canada's Army.

7. Warfare in the pre-industrial era reflected pre-industrial society. Canadians parading in militias during the 18th and 19th centuries brought to the drill square some skill at arms, an affinity with field work and knowledge of the mechanical tools of the day. Warfare in the information age is very different. Modern combat reflects the technological sophistication of modern society. However, the diversity of highly sophisticated communications, vehicular and weapons systems, and the lethality and range of modern munitions, has added a degree of complexity to modern warfare not easily understood by individuals in society. While the young Canadian is familiar with modern technology, there is a significant skills gap between what one learns in society and the skills needed to fight as a member of a modern army.

8. Military training attempts to bridge that gap by imparting the new psychomotor and cognitive skills that allow today's soldier to fight as a part of a team on the modern battlefield and by developing in that soldier affective (emotional) skills that instil confidence and moral courage without extinguishing compassion or humanity. The psychomotor, cognitive and affective domains of learning are recognized in the Army's training philosophy.

9. Recognition is also made of time's effect on skills. Even with good initial training, skills that are not practised will eventually fade and capabilities will decay over time. The rate of decay of psychomotor and cognitive skills is not the same, and comparatively little is known about such rates. What is known, however, is that the myriad and diverse tasks assigned to the Army necessitate careful management of Army training to ensure that skill acquisition and skill fade do not negatively impact upon the operational readiness of army units to execute their assigned missions and to fight in combat. Managing the training of the Army must be done in such a way as to guarantee that well-trained units are available for rapid deployment into conflict areas when required and that units at a lesser degree of operational readiness can be brought up to acceptable deployment standards in an efficient and effective manner.

## SECTION 4
## THE ROLE OF THE ARMY TRAINING SYSTEMS

10. At the tactical level, Army training is about the business of honing battle skills. At the operational level, the Army training systems are about much more. Through both scientific and creative processes, the Army training systems transform doctrine and standards from the realm of concept to the world of reality. More than teaching the application of tactics to terrain, the training systems forge together a collective will based upon common doctrine and standards, which culminates in combat-capable and operationally ready units. Doctrine, equipment and soldiers cannot of their own accord generate such combat power. Only when all the elements are brought together in the training environment does the potential for this combat power exist, and only through the ingenuity of commanders and the discipline of a systems-approach can that potential be realized. The Army training systems are, therefore, the synthesizing mechanisms that ultimately create cohesive combat power.

11. The Army's training systems place heavy emphasis on the role of formation commanders and unit commanding officers in individual, collective and continuation training, and in professional development. This emphasis ensures that the Army meets its operational commitments and maintains reliable combat skills. It is recognized that only at the unit level and

above are resources and experience sufficient to best solve the Army's training problem of skill acquisition and skill fade.

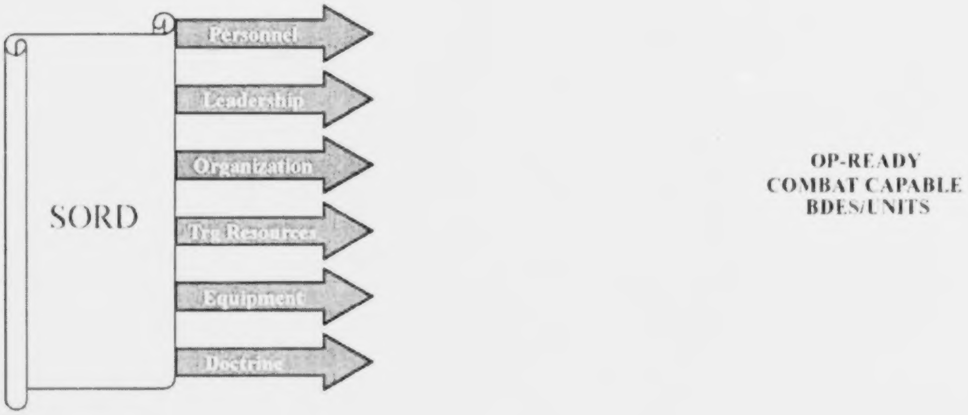

**Figure 1-1: The Role of Army Training**

## SECTION 5
## THE PRINCIPLES OF TRAINING

> *Training is a great art: there are principles of training just as there are principles of war.*
>
> **—Field Marshal Bernard Montgomery**

### GENERAL

12. The Army training systems follow nine principles of training, which provide guidance to commanders when considering training design and are tenets by which one can judge training effectiveness. The nine principles of training are described below.

### TRAINING IS COMMAND-DRIVEN

13. Command responsibilities include the management of formal individual training and employment experience for the career-long benefit of subordinates. Commanders must play a role in both the individual training and education of their subordinates. These are complementary activities: training provides the technical and procedural knowledge and skills

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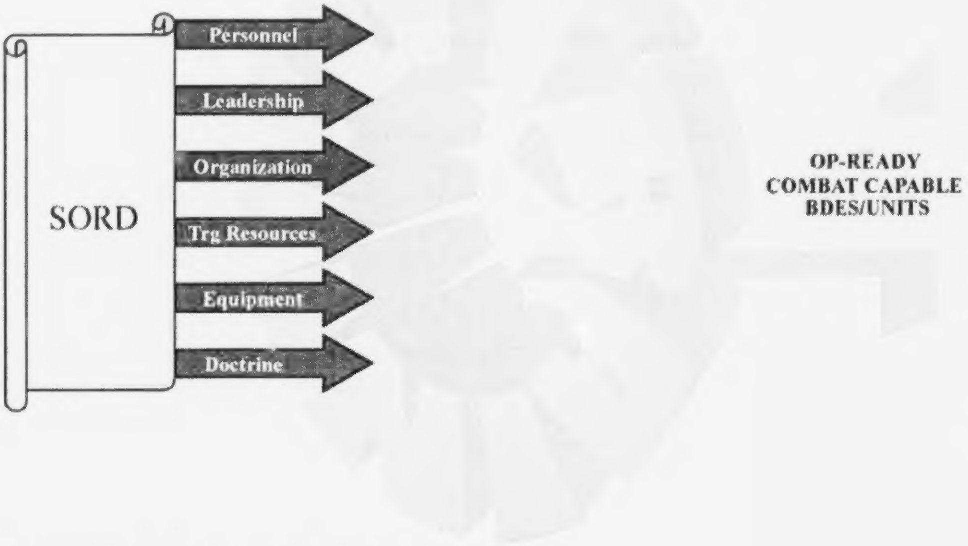

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required in the performance of assigned duties, while education provides a base of knowledge and intellectual development which can be used to interpret information reasonably and exercise sound judgement. Commanders select subordinates to undergo individual training and education. Once skill and knowledge are acquired, commanders must employ qualified subordinates to reinforce this learning through job experience. While the Army's individual training system trains soldiers and leaders, it is reliant upon commanders to manage input and output in order to ensure professional development occurs.

14. Collective training is, above all, a function of command. It is the mechanism by which commanders shape and influence soldiers and through which they instil collective confidence. Collective training is how commanders create cohesion. All commanders who wish to command cohesive and well-trained forces must be competent trainers.

15. Commanders must be actively involved in training, ensuring that its focus is correct and that it is adequately resourced, well-organized and skilfully conducted. Commanders of units and formations must also be involved in training confirmation to ensure that standards are met and subordinate commanders clearly understand the higher commander's intent. Commanders must also be engaged in the feedback mechanisms—the After Action Review (AAR) and the Army Lessons Learned processes—that improve both troop training and Army learning as a whole.

## TRAIN WITHIN THE LAW

16. All training will be effected in strict obedience to the *Laws of Armed Conflict*, the *Criminal Code of Canada*, and the *National Defence Act* (Section 130). Canada maintains a reputation as an enlightened democracy, and Canadian values reflect the highest regard for individual freedom and well-being, with equal commitment to the rule of law. The training of Canada's Army will remain consistent with these values. All commanders and trainers must remain cognizant that trainees, especially recruits, absorb everything they learn and see in training, even if it is illegal, improper or contrary to Canadian values. Failure to correct any transgression of the law, both in letter and in spirit, during training will appear to the trainee to be tacit approval of any such transgression. Actions sanctioned in training will be practised on operations; if unlawful, such actions will have serious debilitating effects upon unit operational capability and honour, the pride of Canada's Army and Canada's international reputation.

## TRAIN TO ONE STANDARD

17. Given the size of Canada's Army, it is essential that there be but one set of training standards. Standards for individual training are codified within various qualification standards (QS) and within the individual battle task standards (IBTS). These standards are established and maintained on the authority of the Commander LFDTS. Likewise, for collective training, the Commander LFDTS is responsible for the maintenance of the Army's battle task standards (BTS), which are to be used by field force commanders in training their subordinates. Collective training performance will be measured against assigned standards. The BTS remain the performance objectives of collective training.

18. All training standards are derived from operational doctrine. Doctrine has been divided into specific battle tasks, each maintaining a specific time and accuracy standard, together called the Battle Task Standard. The aim of all collective training is to successfully achieve one or more prescribed BTS, in the same way that individual training events are designed to successfully achieve performance objectives defined in a QS. Accordingly, all exercise instructions should state which BTS are being exercised, precisely describe the expected training outcome and define how success will be measured.

19. Both the regular and reserve components train using the same QS and BTS. However, resource and time constraints preclude the Reserves from achieving all of the performance objectives or sub-tasks defined in each QS or BTS. Accordingly, all standards have been subdivided into essential, supplementary and residual components. The Reserves will train to the essential component of each standard and be prepared to train to the supplemental component when reserve soldiers are required to augment the Regular Force. The residual component will not be trained by the Reserves (see Chapter 6).

20. As the authority on all Army training standards, the Commander LFDTS's mandate will not impede the practice of mission command during training. Commanders at all levels will have the freedom to use their initiative and imagination to define training conditions and to design and conduct unit, individual and collective training. However, the maintenance of standards will be the responsibility of the Army's training authority. This will ensure that a common high standard of training is achieved.

21. The Army's QS and BTS have a war fighting focus. However, Canadian soldiers must be ready to perform their duties across the full spectrum of conflict. Most conflict environments will require a mix of combat and non-combat activities even if the combat aspect is only potential. Soldiers and units may well have to conduct both types of activity in the same vicinity on the same day. Whether conducting combat or non-combat tasks, the doctrine of Canada's Army demands that our soldiers know how to impose their will upon adversaries by seizing and maintaining the operational initiative. The ability to impose one's will requires first and foremost a mastery of combat skills. It also requires sound TTP for non-combat activities and discretion when considering the application of force, particularly with regard to rules of engagement (ROE). While the commanders must ensure that war fighting QS and BTS are adhered to, they must also develop training conditions that teach and apply theatre and mission-specific skills.

22. All training—QS, BTS and mission-specific—must be as realistic as possible in order to prepare soldiers adequately and to reduce the inevitable surprises and shocks of war. In order to allow soldiers to practise the seizure and maintenance of the initiative, no aspect of training is to be made notional if a means to simulate that aspect is available. Commanders are responsible to ensure that we train as we intend to fight.

## TRAIN SAFELY

23. All training must be conducted in a manner that is safe for the participants. Even classroom training, which may seem benign, may pose risks if munitions or hazardous materials

are involved. Therefore, the safety regulations prescribed in B-GL-381-001/TS-000 *Training Safety*, together with local safety policies, shall be adhered to without deviance.

24. While classroom instruction, tactical exercises without troops, simulations and other training methods are valuable, the live firing of weapons in simulated tactical settings—with a high degree of realism—is essential to operational readiness. Realistic field training, particularly that involving manoeuvre or live firing, while critical, is also inherently dangerous. It must be supervised and conducted under controlled conditions.

25. Safety is the responsibility of every soldier and leader, regardless of rank or appointment. Everyone involved in training must ensure correct drills, procedures and safety precautions are strictly adhered to, and they must take immediate action to stop activities that are dangerous. Such adherence does not imply circumventing or disregarding the chain of command. While responsibility for training safety is universal, it must be emphasized that accountability for safety rests ultimately with those in command and not with the appointed safety staffs.

26. While realism and challenge are desired in all training events, they must not come at the expense of safety. Therefore, all personnel involved in training must regard training safety not only as a principle but as an integral part of training.

## TRAIN PROGRESSIVELY

27. Training safety is enhanced with proper training progression. Individuals must acquire certain skills before they can be effective in team training; likewise, teams, crews, detachments or sections must reach some degree of competency in their collective skills before they can participate safely and successfully in troop or platoon training. Naturally, troops and platoons must get their act together before progressing on to company/squadron/battery and combined arms training. The Army has a structured and progressive approach to training that includes seven levels (described in Chapter 2), starting with the individual, and proceeding to the formation level. Within each level there are three stages of training: preliminary, practice and confirmation (Chapter 5). Soldiers should complete all three stages before progressing from one level to another. Such progression is important as it alone promotes mastery of skills, common understanding of standing operating procedures (SOPs) and TTPs, and a shared understanding of higher intent throughout a unit/formation. Commanders who can observe their subordinate commanders and troops undergoing progressive training will have the advantage of ensuring that their intent is understood. In this regard, cohesion will grow substantively with each stage and level of training. Previous collective training or recent operational experience may provide a commander an opportunity to truncate training progression and start at levels that reflect that unit's current capabilities. Risk is assumed whenever such truncation occurs, and it may be manifested in individuals lacking expertise or in groups acting without cohesion. Short cuts in training should be deliberately stated in training plans and recognized by the chain of command, and subsequent training should be monitored to assess risk and confirm competency.

## TRAIN TO NEED

28. The Army can not afford to have every unit simultaneously attempting to train to the highest level of operational readiness. Training some units or formations to achieve or to maintain this level of capability requires the allocation of a greater share of the Army's training resources to those units, which, in turn, means that other units will only be able to train to a lower level. In this way training will be aligned with the operational tasks delineated in the SORD, and those units designated to achieve high readiness will become the main effort for Army training resources. It is foreseen that designation of such units will continue on a cyclical basis. Therefore, unit training and exercise plans must reflect the current and projected operational status of each unit and provide training for the specified operational tasks.

29. The Reserve Force will not be directly constrained by the same tiered readiness requirements of the Regular Force. However, all Reserve units must have the resources required to maintain an essential level of capability. Units with specialist skill sets (psychological operations [PSYOPS], civil-military cooperation [CIMIC], etc.) may receive resources to train to higher levels of capability depending on the operational demand for such skills.

30. Individual training must also answer a specific qualification requirement, which is generated by the needs of the individual's job or the skill and knowledge requirements of the next developmental period (DP—see Chapter 3 and Annex C). Occupational speciality specification (OSS) training should only be conducted when a lack of trained personnel (including authorized redundancies) has been forecast in a unit. Army unit qualification lists (UQL) and each unit's state of operational readiness will be used to determine individual training needs. A demand for OSS individual training may be denied if the above criteria have not been met. The UQL has been designed to assist with the determination of the types and number of special personnel qualification requirements (SPQRs), including operational redundancies, that a unit must hold to be operationally effective. It is an efficiency control measure that limits over-production of qualified personnel. Training beyond need consumes scarce resources that would be better invested in other operational training imperatives. Individual training needs and UQL remain problematic in the Reserve Force and will be subject to rationalization in the Land Force Reserve Review process.

## RESOURCES MUST FOLLOW TASKS

31. The SORD contains the Army Training and Task Table, which sets the assigned training level for each departmental Defence Plan task. Each task has a prescribed set of BTS and an allocation of resources to achieve the required capability level. In principle, the resources are "bolted" to the task as it is not feasible to assign a task without the resources required to achieve it, nor can resources be removed without reduction of the task. Commanders at all levels are responsible to achieve the training level assigned in the SORD within the resource envelope provided. If a training level is assessed as unachievable for any reason, the commander making that assessment must explain to the superior commander what the perceived risks to operational capability are. The superior commander must either resolve the issue or assume the risk and declare it to the next level of command. Only under extreme circumstances may a superior commander assign a training task to a subordinate in the knowledge that resources are

insufficient to accomplish it. In such cases the entire chain of command must be alerted to the risks involved.

## TRAINING MUST FACILITATE LEARNING

32. The Army must derive the greatest possible amount of learning and improvement from each training event. Such learning and improvement must be to the benefit of participants as well as the institution. By fostering a learning culture within our soldiers and within our organization, the Army will be better able to improve its performance, both in training and on operations.

33. To facilitate participant learning, the practice stage, rather than the preliminary or confirmation stage, of training must be emphasized. Tasks should be practised a minimum of two to three times. If necessary, fewer tasks must be trained in order to achieve this repetative practice. Yet, practice in and of itself is not enough: it must be complimented with timely and accurate feedback on performance. The traditional method of critique style feedback has been found to be inadequate. Therefore, the Army has instituted the AAR process.

34. AARs are professional discussions, usually conducted by observer/controllers, instructors or commanders, of completed training events. AARs are conducted informally at all stages of all levels of training and formally whenever resources are at hand to do so. AARs are focused on performance standards (BTS) that enable soldiers to understand what happened, why it happened, what should have happened and how to sustain strengths or improve upon weaknesses. Soldiers learn and retain more if they are actively involved in the identification of strengths and weaknesses in their own performance and in the development of means to improve performance. AARs allow for, even encourage, such active involvement. They also allow commanders to see to what extent their concept of operations and intent (explicit and implicit) are understood by the soldiers throughout their command. Furthermore, AARs facilitate immediate learning within the tactical organization involved.

35. The AAR process acts as an institutional feedback mechanism for the Army as a whole. It provides input into the Army's doctrine, training, equipment and organization review processes. It also provides necessary data for the proper review and amendment of SOPs/TTPs and of Army doctrine, QS and BTS. Participation of Army Lessons Learned Centre personnel and other designated personnel in the formal AAR process will further institutional learning within the Army. All forms of AAR will help cultivate a true learning culture within the Army. The role of the observer/controller and the AAR process are discussed in Chapter 5 and Chapter 7 respectively.

## TRAINING MUST BE CONFIRMED

36. Confirmation is an assessment of the collective performance of a tactical grouping against a specific BTS or group of BTS. Confirmation should be overseen by the commander two levels higher (e.g. a brigade commander for combat team training). If the confirmation is successful, the soldiers proceed to the next level of training. If not, the deficient battle tasks are practised again and re-confirmed. Ideally, progression to the next level should not occur before

all the BTS specified for that level are confirmed. In reality exceptions to this ideal will occur. Sub-tasks to BTS and non-critical tasks may be designated by a commander as training events that may not need or demand confirmation, or may not need re-training or re-confirmation before progression occurs. This designation might occur when training time and resources are scarce, when re-training may have a debilitating second- or third-order effect upon a unit training plan, or when re-training or re-confirmation can be achieved at a later stage in training. Nevertheless, the principle that training must be confirmed before progression can occur should be adhered to whenever possible.

37. Confirmation should be considered as part of a collective learning method, not an evaluating tool for individual commanders at any particular level. Mistakes must be accepted as a fundamental part of collective training and team learning and should be held as a positive aspect of honest operational training.

38. The principle of confirming "two down" must be observed. Leaders who train their subordinates will become too engaged to render unbiased, objective confirmation. Unit commanders will use their own judgement to manage confirmation within their commands. However, combined arms training (combat team, battlegroup and brigade) will be conducted by brigade commanders, Land Force Area commanders or by Commander LFDTS (the CLS's designated authority for brigade level training). In this way, it is recognized that success and failure are as much a product of a healthy command climate as they are the result of effective training technique.

39. Only in exceptional circumstances should leaders confirm their own training. Commanders training units for operations are busy and may have to forego confirmation of non-critical tasks (for example, sub-tasks within a specific BTS) in order to be present at other confirmation training events. They may ask subordinates to confirm such tasks. During operations, when new missions or tasks arise, there may not be scope for superior commander's to confirm all training. In all such events the chain of command should acknowledge what specific training has not been confirmed in accordance with the "two up" principle, and approval should be sought from the appropriate superior commander to ensure that the risks associated with this exception are understood.

## SECTION 6
## CONCLUSION

40. Commanders manage the professional development of their subordinates through training. Training is also the mechanism by which commanders forge operationally ready and combat-capable units and formations. While training must remain command-driven, with a commander's creative and critical participation driving the training process, it must also be remembered that the Army has a systematic approach to training, which establishes a specific training scope and focus for all commands. The Army also requires that commanders train within the rule and spirit of the law. As well, our soldiers need realistic training—in strict adherence to the prescribed training safety regulations and policies—where commanders use all the available allocated resources to train as we intend to fight. The CLS will designate which units and formations are the main effort for Army training resources. The allocation of resources to those units will reflect the two principles of train to need and resources following tasks. All

training will be designed and measured using common operational standards encapsulated in Army QS and BTS. Regardless of what training status a unit has, all training will be conducted in a progressive manner, ensuring confirmation is achieved before higher levels of training are started. Also, the AAR process should be used liberally to improve collective training performance and to ensure the dissemination of the commander's implicit and explicit intent. Use of these principles will ensure that Canada's Army produces highly qualified individuals and cohesive, deployable, and combat-ready units and formations. The remainder of this publication will expand upon these principles.

# CHAPTER 2
# TRAINING AND OPERATIONS

> *The armed forces should be primarily trained and equipped for the possibility of conflict with a first-class power...*
>
> **—Lieutenant-General Guy Simonds, *The Canadian Military: A Profile***

## SECTION 1
## OPERATIONAL READINESS: THE REASON WE TRAIN

1. Canada's Army remains a key instrument of the Canadian government's domestic and international policy. The Army's role in national policy is defined in the departmental Defence Plan, which, in turn, is predicated on the direction articulated in the 1994 Defence White Paper. The Defence Plan directs the Army to meet numerous operational tasks that span the entire Spectrum of Conflict. These tasks include preparations for war—in the event that our sovereignty is threatened or when the Canadian government decides to participate with NATO or the United Nations in operations of war. However, most of the defence objective tasks involve operations other than war (OOTW) in support of Canada's interests and most often as part of a United Nations or NATO coalition. The following diagram depicts the Spectrum of Conflict in which Canada's Army operates and upon which direction in the Defence Plan is produced.

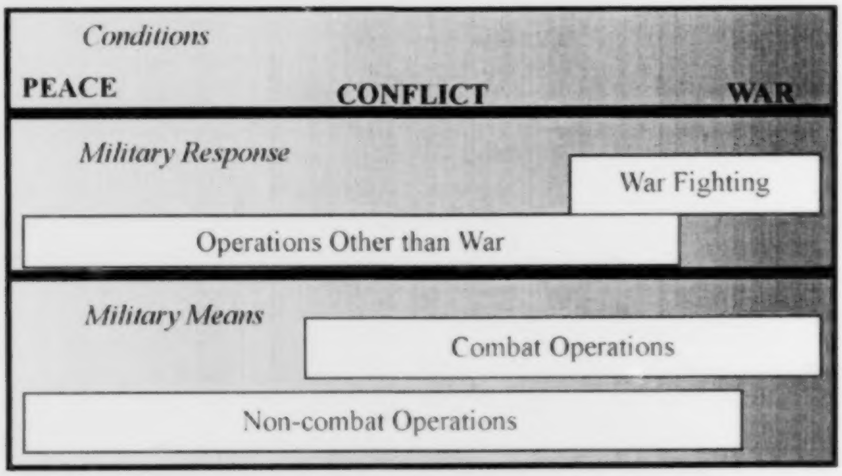

**Figure 2-1: The Spectrum of Conflict and the Continuum of Operations**

2. The Army must be prepared for all types of operations within the Spectrum of Conflict. While some types of operations may seem benign, most hold at least the potential for organized violence and require Canadian soldiers to apply lethal force to bring about conflict resolution. Therefore, while the Spectrum of Conflict may seem progressive, in fact, the potential for violence and the requirement for combat capabilities are real throughout the Spectrum. To enhance understanding of this potential, Canada's Army has adopted the model depicted in Figure 2-2, which illustrates the type of combat scenarios our soldiers may face. View 1

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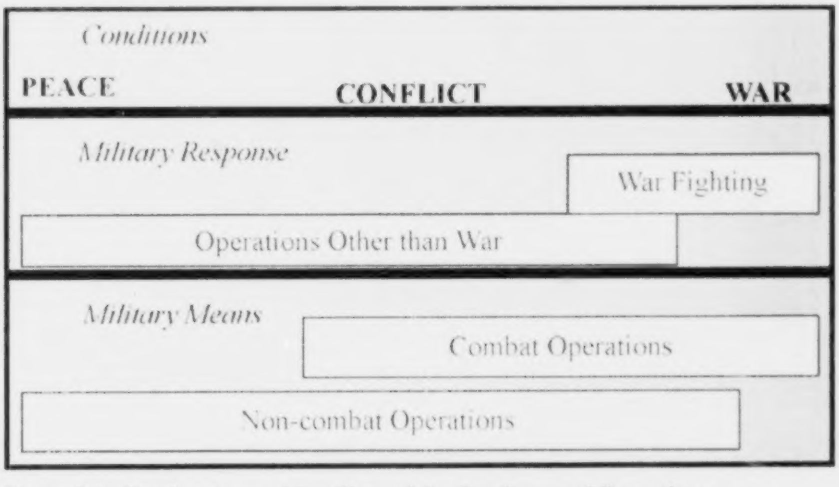

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2. The Army must be prepared for all types of operations within the Spectrum of Conflict. While some types of operations may seem benign, most hold at least the potential for organized violence and require Canadian soldiers to apply lethal force to bring about conflict resolution. Therefore, while the Spectrum of Conflict may seem progressive, in fact, the potential for violence and the requirement for combat capabilities are real throughout the Spectrum. To enhance understanding of this potential, Canada's Army has adopted the model depicted in Figure 2-2, which illustrates the type of combat scenarios our soldiers may face. View 1

operations involve intense combat missions in situations of general war. View 2 involves a mix of combat and non-combat operations in conflict situations that differ from traditional inter-state warfare.

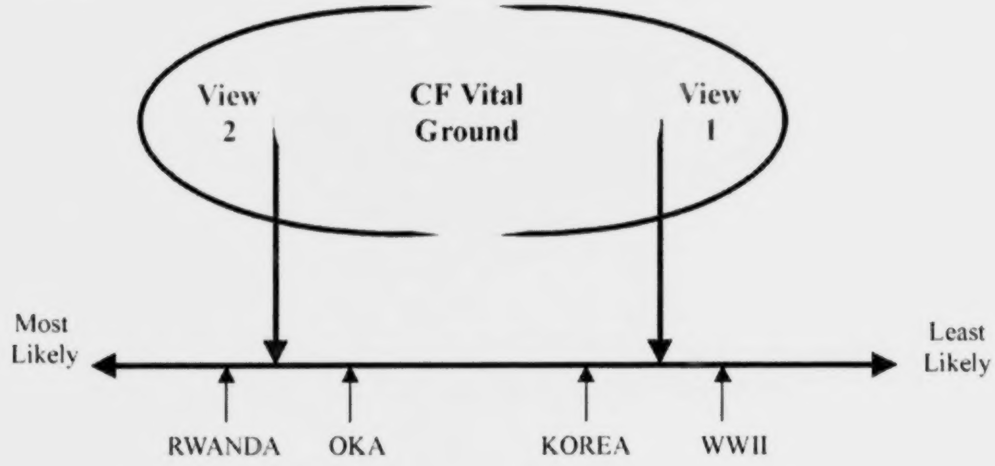

**Figure 2-2: The Operational Environment**

3. Canada's Army is frequently committed to View 2 operations, while it still has a standing requirement to be prepared for View 1 eventualities. The prospect of combat engagements is prevalent in both views. Furthermore, the effectiveness of forces engaged in View 2 missions often rests on their demonstrable ability to use combat power to achieve their goals, even if this combat capability is held as a deterrent. Therefore, a credible combat capability is essential in Army operations in both View 1 and View 2 missions.

4. If the Army lacks the capability to operate throughout the Spectrum of Conflict, it will not be able to satisfy the demands of national policy. Hence, the Army must be multi-purpose. Also, if Canadian soldiers are not trained and equipped to engage in combat, they will have limited operational utility. Such limited ability would create a liability for our allies, and Canadian prestige in coalition operations would suffer. Therefore, Canadian units must be combat capable. Consequently, the Army trains Canadian soldiers, leaders and units for View 1, multi-purpose, war-fighting skills, and adds to this training the theatre and mission-specific training (TMST—defined below) required for specific View 2 type operations.

5. The Canadian Forces is developing a four stage mobilization plan that puts into context routine View 2 operations and how the Armed Forces will transition to an expanded capability in the event of a View 1 general war. Planning for Mobilization Stage 1 (Force Generation) deals with our continued involvement of forces in View 2 operations. Stage 2 (Force Enhancement) planning covers the forecasted contingency of a brigade deployment to View 1 or 2 operations with limited sustainability and with up to sub-unit Reserve component augmentation. Mobilization Stage 3 (Force Expansion) and Stage 4 (National Mobilization) envision the commitment of forces beyond current capabilities and would see significant expansion of the Reserve component. Figure 2-3 depicts the stages of mobilization.

| MOBILIZATION STAGE | OPERATIONAL ENVIRONMENT | SIZE OF FORCE |
|---|---|---|
| STAGE 1<br>(FORCE GENERATION) | VIEW 2 | UNIT OR BATTLE GROUP |
| STAGE 2<br>(FORCE ENHANCEMENT) | VIEW 1 OR 2 | BRIGADE<br>(LIMITED SUSTAINMENT) |
| STAGE 3<br>(FORCE EXPANSION) | VIEW 1 OR 2 | BRIGADE<br>(SUSTAINED) |
| STAGE 4<br>(NATIONAL MOBILIZATION) | VIEW 1 | BRIGADE AND ECHELONS ABOVE |

**Figure 2-3: Mobilization Stages**

## SECTION 2
## THE FORCE GENERATION CHALLENGE

6. The number and diversity of Land Force tasks assigned in the Defence Plan precludes the Army from undergoing force generation and force employment as one entity (e.g., as a formed "Canadian Division"). The requirement for Canadian units to be ready to conduct simultaneous operations, domestically and on both View 1 and View 2 missions, together with constraints upon resources, climate limitations and the demands for instructor augmentation, prevents all Army units from maintaining concurrently the same level of war-fighting skill and competencies. Therefore, the Army will designate only a portion of its field force to be ready for operational deployments and concentrate collective training resources in time and space to ensure that these units are indeed well-equipped, combat-capable and trained to a high readiness status (see Figure 2-7). The training of these units will be the main focus of the Army training systems. Other portions of the field force designated to be at lower states of readiness will support the training of high readiness forces and perform other tasks, such as augmentee support to the individual training system.

7. The designation of main effort and supporting effort formations and units necessitates a cyclical approach to Army training and force generation. The Army's training systems are reliant upon the maintenance of this cycle. There are three distinct phases to the force generation cycle:

a. **The Support/Reconstitution Phase**. A period in which units recuperate after operations. This phase is characterized by a relatively high personnel turnover due to postings, individual career training courses, individual and group taskings in support of other army training, low level collective training, recruit intake and the acquisition of new equipment. This phase will also include "down time" for improved quality of life. The last part of this phase will see units reconstituted in preparation for the training phase.

b. **Training Phase**. A period in which a brigade or unit undergoes progressive training toward being declared combat capable and ready (less TMST) to deploy on operations. Training will be focused on war fighting competencies. Personnel stability will be ensured in units undergoing training in this phase. At the end of the Training Phase, the unit will be considered combat capable.

c. **The Operations Phase**. The period of time that a brigade or unit is considered at a high readiness status and is ready to meet commitments assigned to it in the SORD or unforecasted operational commitments.[1] While a unit is considered combat capable when it starts the Operations Phase, it is not considered operationally ready until it has the requisite TMST. TMST is all the training that is directed toward specific mission requirements. This training includes material not covered in QS or BTS training, material regarding operations in specific environments, and material from QS and BTS training that needs to be re-iterated or refreshed under conditions relative to the mission (e.g., live firing of crew served weapons or manoeuvre in jungle, urban or mountainous environments).

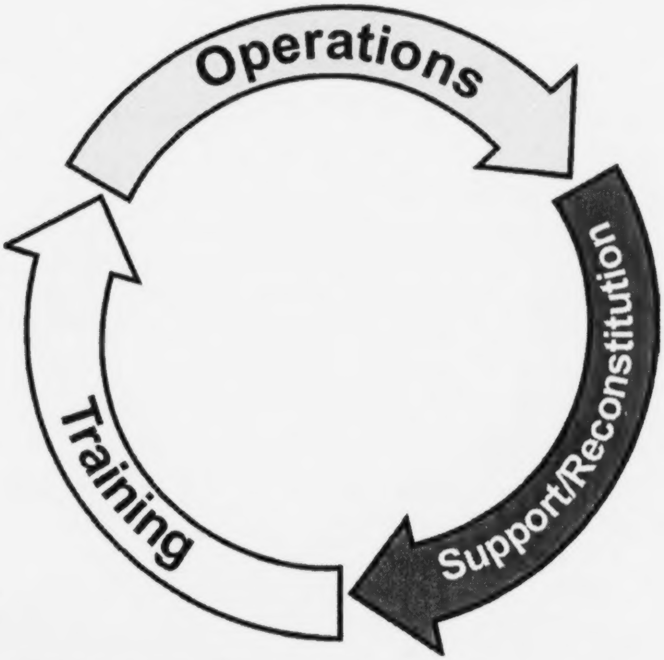

**Figure 2-4: Phases in the Force Generation Cycle**

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[1] The Army will train for war in battle groups and brigades constituted from units in the order of battle. Operational readiness, however, may be managed using smaller building blocks. Cohesive and well trained sub-units may form the primary building blocks for operational readiness and deployment on unforecasted contingencies. When this occurs, the management of the three-phase cycle must devolve to commanding officers. While the unit is not the optimum level to manage force generation cycles, it may become necessary to do so during periods of high operations tempo across the Army.

8. The allocation of training resources to a unit will be determined by the phase of the force generation cycle that unit is in. A unit in the Operations Phase will be assured relatively stable personnel manning and will receive all required continuation training and TMST resources. A unit in the Training Phase of the cycle will be the main effort of Army collective training resource allocation and will also have personnel stability throughout the training period. Units in the Support/Reconstitution Phase will suffer personnel turbulence and their supporting status will be reflected in the limited resources allocated to them for collective training; they will be granted only those resources needed to maintain lower-level collective skills (to be defined yearly within the SORD). The length of time formations and units spend in each phase will be determined by the chain of command and delineated in the SORD.

## OPERATIONAL READINESS AND FORCE GENERATION

9. Operational readiness is the ability to provide a timely and appropriate military response to any threat. Operation readiness comprises unit personnel strengths, the qualifications of unit personnel and their status in screening for deployment, unit equipment serviceability, and individual and collective training. While training is but one component of operational readiness, it is the most critical. Training is the mechanism that melds these various components together to create responsive forces. It synthesizes doctrine and standards, equipment and resources, soldiers and leaders into combat-capable units and formations. Training within the force generation cycle must be managed to define which units or formations will achieve higher states of operational readiness when needed.

10. The Army conducts four categories of training—individual, collective, continuation and TMST (all but the latter are defined in later chapters)—that, when combined, prepare forces for operations.

11. While operational readiness is a result of deliberate Army and CF planning, Army force generation and sustainment is founded upon the Army's individual and collective training systems. Individual, collective, continuation training and TMST are conducted systematically to produce ready forces and sustainment forces. It is, therefore, a cyclic systems approach that is the guarantor of operationally ready forces and their sustainability over time. Sustainment is particularly critical when transitioning to Mobilization Stages 2, 3 and 4. Anything less than a systems approach to operational readiness will eventually erode the Army's operational potential and jeopardize mobilization planning. Therefore, training for force generation and sustainment must be systematic and cyclical, as depicted in Figure 2-5.

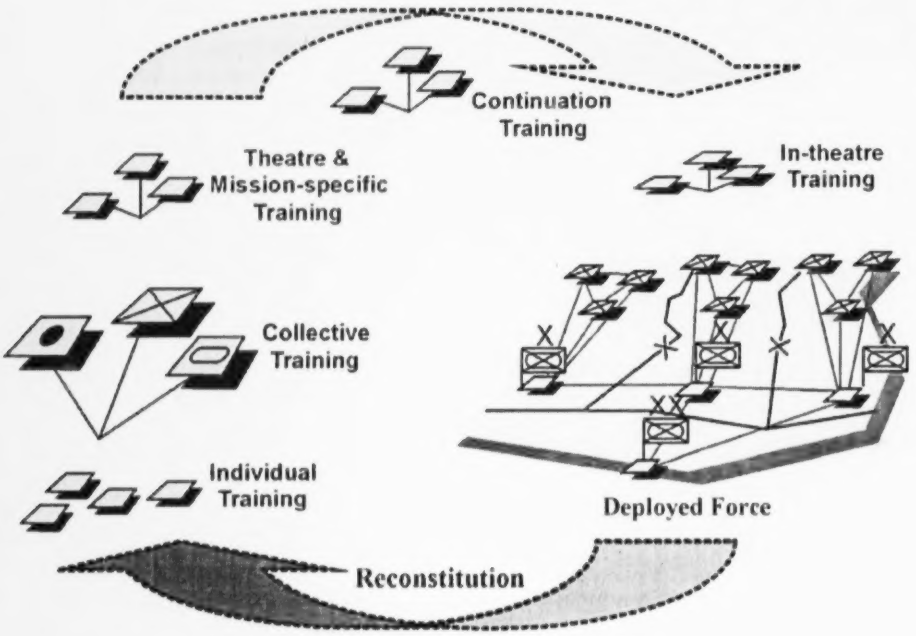

Figure 2-5: Training in the Force Generation Cycle

12. The cycle comprises individual training, collective training in preparation for operations, TMST, and continuation training to preserve individual and team skills, in-theatre training during operations and low-level training during force reconstitution. In the cycle, new doctrine and equipment may be integrated into the force; lessons learned from operations will be incorporated into new standards and teaching; leaders and trainers are to be selected and trained; and the Army training systems as a whole will continue to evolve. These are complex undertakings that require a systems structure and the discipline to adhere to a systems approach.

13. Reserve Force units will not be subject to the same force generation cycle as the Regular Force. Reserve Force units will train uniformly to maintain an essential level of capability that will facilitate augmentation for Mobilization Stages 1 and 2 as required and to provide the basis for expansion if further mobilization is needed. Reserve training cycles are discussed in Chapter 6.

## SECTION 3
## MEASURES OF OPERATIONAL READINESS

14. Operational readiness must be measurable. Personnel screening and equipment serviceability rates are good indicators. There must also be criteria for measuring training and the differences in training standards between various components of the Army. Hence, the training component of operational readiness will be measured by using levels of training and levels of capability (LOC), which are defined as follows:

a. **Levels of Training**. Following the principle of progressive training stipulated in Chapter 1, the Army has divided training into seven levels, each with its own set of collective battle task standards (defined as suffixes A-G in the BTS manuals). Higher-level training is built on the success of lower-level training. At each level, training should be comprehensive enough to ensure a degree of mastery is attained before the next level of training commences. The levels are described in detail in the following section.

| LEVEL | DESCRIPTION |
|---|---|
| 7 | Formation Level Training |
| 6 | Unit/Combined Arms Unit Training |
| 5 | Combined Arms Sub-unit (Combat Team) |
| 4 | Sub-unit (Coy, Sqn)*^ |
| 3 | Sub-sub Unit (Troop/Platoon) |
| 2 | Section, Crew, and Detachment Battle Drills |
| 1 | Individual Skills/Battle Tasks |

*- Artillery will conduct Regimental Training during Level 4

^- Reserve Force Level 4 will culminate in Combined Arms sub-unit (e.g., Company Group). Regular Force Level 4 may include combined arms preliminary training (including CAX)

**Figure 2-6: Levels of Training**

b. **Levels of Capability (LOC)**. A LOC is a measurable level of competence in war fighting that reflects collective achievement and the maintenance of a specific set of QS and BTS. It is the minimum standard of performance deemed necessary to allow forces to progress to more advanced training or to be committed to operations. There are two distinct LOC in the Army, each reflecting the differences of standards that exist between Regular and the Reserve components of the Army. These LOC are listed below and explained in detail later.

(1) Minimum LOC (MLOC): Regular Force core competencies based on all components of QS and BTS.

(2) Essential LOC (ELOC): Primary Reserve Force core competencies based on essential components of QS and BTS.

15. Within each LOC, operational readiness is measured by the level of training attained (e.g., MLOC 5 = combat team competency including all the appropriate QS and BTS gateway training).

a. **Readiness States**. The LOC and levels of training are combined with other components of operational readiness (personnel strengths, equipment serviceability, etc.) to determine a unit's readiness state. There are three major readiness states:

(1) **Reduced**. A unit with low personnel strengths (less than 90% of establishment) and low equipment holdings (less than 85% of entitlement)

requiring more than 180 days of preparation and training to deploy on overseas operations. Such units, however, must retain a capability to respond to domestic operations emergencies.

(2) **Normal**. A unit with no less than 90 % of establishment strength and at least 85 % of equipment entitlement, requiring 30-180 days to deploy, dependent upon the LOC, level of training, personnel screenings and equipment serviceability requirements for deployment.

(3) **High**. A unit with 100 % manning of establishment, 95 % holdings of equipment entitlement and requiring 30 days (or less) notice to move for deployment, dependent upon LOC and level of training achieved, personnel screenings and equipment serviceability requirements, and the need to complete TMST within the allotted notice to move (NTM) timing

**NATO Allied Command Europe Rapid Reaction Corps (ARRC) Readiness States**

| NATO Readiness States | R10 | R9 | R8 | R7 | R6 | R5 | R4 | R3 | R2 | R1 |
|---|---|---|---|---|---|---|---|---|---|---|
| NTM | 365+ | 365-181 | 180-91 | 90-61 | 60-31 | 30-21 | 20-11 | 10-6 | 5-3 | 2-1 |

**Canadian Readiness Model**

| Canadian Readiness States | Reduced | Normal | High |
|---|---|---|---|
| NTM | 365+<br>365-181 | 180-91<br>90-31 | 30-21<br>20-11<br>10-3<br>2-1 |
| **DPG Unit/Fmn Tasks** | | MCF-OP SABRE | Vanguard BG<br>NEO<br>IRF(L)-OP GAUNTLET<br>SHR Brig-OP VIKING<br>UNSAS |
| Level of Readiness | **<85% UQL & <75% Eqpt Serv<br>Trg: MLOC 1-3<br>ELOC 1-4** | >92% UQL & >85% Eqpt Serv<br>Trg: MLOC 1-7<br>ELOC 1-4 | 100% UQL & >95% Eqpt Serv<br>Trg: MLOC 1-7<br>& TMST |

Legend

NTM - Notice of move timings (days)
DPG - Defence Planning Guidance
MLOC - Minimum Level of Capability
ELOC - Essential Level of Capability
R - Readiness State
NEO - Non combattant evacuation

MCF-Op SABRE - Main Contingency Force Bde Gp
IRF(L)-Op GAUNTLET - Immediate Reaction Force (Land) Bn Gp
SHR Brig-Op VIKING - Standby High Readiness BG
UNSAS - UN Standby Arrangement BG and Bn Gp

UQL - Unit Qualification List
Eqpt Serv - Unit Equipment Sevicable within NTM as per Op Readiness Report
TMST - Theatre and Mission Specific Training
> Greater than
< Lesser than

**Figure 2-7: Readiness States, Levels of Capabilities and Training, and Operational Tasks**

16. Units in the Support Reconstitution Phase of the force generation cycle may be put at a reduced readiness state, those in the Training Phase should be at a normal readiness state, and those in the Operations Phase will be held at high readiness. The breakdown of readiness states into LOC and levels of training allows for considerable flexibility in the management of units in the force generation

requiring more than 180 days of preparation and training to deploy on overseas operations. Such units, however, must retain a capability to respond to domestic operations emergencies.

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**NATO Allied Command Europe Rapid Reaction Corps (ARRC) Readiness States**

| NATO Readiness States | R10 | R9 | R8 | R7 | R6 | R5 | R4 | R3 | R2 | R1 |
|---|---|---|---|---|---|---|---|---|---|---|
| NTM | 365+ | 365-181 | 180-91 | 90-61 | 60-31 | 30-21 | 20-11 | 10-6 | 5-3 | 2-1 |

**Canadian Readiness Model**

| Canadian Readiness States | Reduced | | Normal | | High | | | |
|---|---|---|---|---|---|---|---|---|
| NTM | 365+ | 365-181 | 180-91 | 90-31 | 30-21 | 20-11 | 10-3 | 2-1 |
| DPG Unit/Fmn Tasks | | | MCF-OP SABRE | | Vanguard BG | | | NEO |
| | | | | | | IRF(L)-OP GAUNTLET | | |
| | | | | | SHiR Brig-OP VIKING | | | |
| | | | | | UNSAS | | | |
| Level of Readiness | [illegible]<br>Trg MLOC 1-3<br>[illegible] | | <92% UQL & <85% Eqpt Serv<br>Trg: MLOC 1-7<br>ELOC 1-4 | | 100% UQL & >95% Eqpt Serv<br>Trg: MLOC 1-7<br>& TMST | | | |

**Legend**

NTM - Notice of move timings (days)
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MCF-Op SABRE - Main Contingency Force Bde Gp
IRF(L)-Op GAUNTLET - Immediate Reaction Force (Land) Bn Gp
SHiR Brig-Op VIKING - Standby High Readiness BG
UNSAS - UN Standby Arrangement BG and Bn Gp
UQL - Unit Qualification List
Eqpt Serv - Unit Equipment Seviceable within NTM as per Op Readiness Report
TMST - Theatre and Mission Specific Training
> - Greater than
< - Lesser than

Figure 2-7: Readiness States, Levels of Capabilities and Training, and Operational Tasks

16. Units in the Support/Reconstitution Phase of the force generation cycle may be put at a reduced readiness state; those in the Training Phase should be at a normal readiness state; and those in the Operations Phase will be held at high readiness. The breakdown of readiness states into LOC and levels of training allows for considerable flexibility in the management of units in the force generation

cycle, making task-tailoring options possible and presenting commanders a means to measure how best to move units from one readiness state to another efficiently and economically.

## SECTION 4
## ARMY TRAINING AND OPERATIONAL READINESS

17. The Army uses LOC and training levels, in conjunction with operational readiness states, to accurately identify the readiness status of particular units. The difference between reduced and normal states of readiness is not specifically the level of training achieved, but the degree to which lower UQLs and equipment holdings restrict attainment of higher level training. Training differences within the various LOC must be further explained by presenting more detailed definitions of LOC and levels of training. It is also important to understand that each readiness state consists of training events that are categorized as individual, collective or continuation.

### LEVELS OF CAPABILITY

18. The LOC presented in Figures 2-8 and 2-10 are multi-functional and are explained below:

a. **Minimum LOC (MLOC)**. A minimum level of competency that reflects the professional skill/knowledge and experience needed by forces before they can progress to a more advanced readiness state or before commitment to operations. MLOC is measured by using the Levels of Training 1-7. MLOC comprises the QS and BTS that must be maintained if the Regular Force is to sustain its combat-capable characteristics. MLOC comprises the standards required to generate combat-capable forces for operational commitments up to and including the MCF SABRE Brigade. It reflects the professional standards of the Regular Force, which, because it is constrained in size, must demand a greater range of skills (cross training and redundancy in qualifications) from its soldiers in order to operate across the spectrum of conflict. Levels of training and unit manning levels for MLOC will be designated in the SORD. Main effort units will be allocated sufficient resources to achieve level 5, 6 or 7, and their personnel will be protected from taskings. Training will be progressive through levels 1 to 6 or 7, confirming selected BTS at each level before training at the next level. Continuation training will prevent skill fade of the skills and knowledge achieved in each level. Upon being confirmed as competent at one level of training under MLOC, that tactical group is considered combat capable at the confirmed level (e.g., MLOC 4) and is ready to progress to higher level training or is ready to undergo TMST before being declared operationally ready for deployment at that level. As indicated in Figure 2-9, the difference between reduced and normal MLOC is outlined as follows:

(1) to achieve MLOC to a normal readiness state, more than 90% of the individual skills required by the unit establishment, including operational redundancies, must be present for training;

(2) all individual must have completed IBTS;

(3) unit equipment holdings and serviceability must be greater than 85%.

b. **Essential LOC (ELOC)**. A minimum level of competency that reflects the skill/knowledge required of the Reserve Force on Class A service and that allows for both augmentation or expansion. It is measured by using the essential components of QS and BTS (Levels of Training 1-4). QS and BTS have been subdivided into essential, supplemental and residual components (described in Chapter 6). The essential components are those tasks and knowledge applicable to the reservist on Class A.[2] The Reserve Force must train the essential component and be ready to train the supplemental component if required. The essential components of QS and BTS ensure that Reserve individual, collective and continuation training provide a core competency, resident in Reserve units, that enables force generation (including supplemental training) to meet Mobilization Stages 1 and 2. These stages include individual and sub-sub unit augmentation of the Regular Force for Stage 1 (Force Generation) and up to sub unit augmentation to sustain Op SABRE commitments in Stage 2 (Force Enhancement). Normally, Reserve units will be at reduced or normal readiness states, conducting ELOC individual training and collective training in order to remain ready to fulfil Stage 1 and 2 requirements. When Reserve Force soldiers are selected to augment Regular Force units for operations, there will be a requirement to address the difference in training standards (the supplemental components) by designing and conducting additional training for augmentees. This "delta" training may occur in a designated area training centre (ATC) or within the receiving unit. Some units of the Reserve Force will sustain higher readiness states for certain skill sets (e.g., nuclear, biological and chemical [NBC]; civil-military cooperation [CIMIC]; psychological operations [PSYOPS]), thus reducing their supplemental training requirement to that which is necessary to achieve commonality with the remainder of the deploying force.

## LEVELS OF TRAINING

19. The seven levels of training further refine the training aspect of operational readiness within each of the LOC. The levels of training are explained in detail below.

20. **Level 1** incorporates all individual QS training for skills and knowledge acquisition. It also includes individual battle task standards (IBTS)—the common denominator in training across all ranks and military occupations (MOCs) in the Army. These are the common standards of personal combat skills that must be achieved by all soldiers deploying to operations regardless of rank or MOC. Differences between the Canadian Forces, Army (Regular and Reserve) and MOC standards may require that additional training be conducted in a unit prior to deployment

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[2] Depending on the specific QS or BTS, this portion will be approximately 40-60% of the total tasks and knowledge requirement of the QS and BTS as determined in the QS and BTS Writing Boards.

to ensure that all deploying personnel reach a common operational standard. The knowledge that all personnel deployed on an operation possess competency in basic military tasks is the foundation of collective trust amongst the members of the force deployed.

21. **Level 2** addresses the formation of small teams that can execute tasks to a very high standard. It uses the BTS letter B suffixes (from the BTS manuals) as training standards. Teams perform many vital functions, including patrolling, the operation of sensor systems that find the enemy, and the weapons platforms that engage and defeat them. Therefore, they are critical to the combat effectiveness of an entire unit. It is vital that the time and resources required to achieve the prescribed standards are assigned to the team leaders in Level 2 training. The resulting teams must remain intact for the duration of the operation for which they were trained. Team cohesion is at the core of a unit's combat power; dispersing the individual members directly diminishes that power. Once formed, teams must maintain their skills at the prescribed intervals to prevent skill decay, even as the unit progresses to higher levels of training.

22. At **Level 3**, teams are aggregated into sub-sub units, creating greater command and control challenges than at Levels 1 and 2. Level 3 uses BTS suffix C as standards. Tactical situations are less predictable and battle drills less detailed. From this level onward, battlefield complexities increase and effective command at one level is essential before higher level training can occur. The collective competencies will develop on top of those attained at the previous level. These competencies are framed in the BTS, which prescribe the conditions and expected outcomes for the performance of each battle task. Training at Level 3 is characterized by the frequent use of battle stands (see Chapter 5) within the sub-unit context.

23. The intent of **Level 4** training is similar to level three, using battle stands to isolate and practise arms specific tasks in each operation of war. Level 4 uses suffix D standards from the BTS manuals, but training may be conducted in the combined arms context in preparation for training as part of the combined arms team in Level 5. Armour and infantry conducting low-level tactics, techniques and procedures (TTP) training is also included. It is important for the field artillery that regimental training occurs during a time when manoeuvre units are doing Level 4 (or lower) to ensure the readiness of forward observation officer (FOO) parties, batteries and the fire support coordination centre (FSCC) to respond properly during Level 5 training. It is also important to specify the unique requirements of the Reserve Force at Level 4. It is the upper level of competency for collective training in the Reserves, beyond which resource constraints are normally prohibitive. Therefore, as much as possible, Reserve Level 4 training should be conducted in the combined arms context, as company group training (or armoured reconnaissance squadron training), providing opportunity to train in combined arms tactics.

24. **Level 5** training is not simply troop/platoon TTP training: it involves a full strength combat team, completely manned and equipped, conducting combat team manoeuvre; it requires an ammunition package and resource envelope allocated in the SORD; and it should culminate in the combat team live fire training within a battle group (BG) context and, if possible, force-on-force confirmation using weapons effect simulators (WES). Level 5 training uses BTS suffix E standards. Continued commitment to the standardized TTP/SOPs trained during Levels 1-4 should ensure a constant improvement of performance through each new level. With successive repetition, lower-level BTS will become easier and quicker to accomplish, thus increasing the unit's overall ability to fight at a higher tempo of operations.

25. To accommodate unit training that must be perfected outside of the all arms team context, **Level 6** comprises both the BTS suffix F that govern these types of operations and the BTS pertaining to the BG (also detailed under suffix F). Unit training conducted in non-manoeuvre units prior to combined arms training should take place to ensure that the requisite common skills, knowledge and attitudes are present before subordinates are integrated into the more complex all arms environment. Level 6 training in staff and command procedures should be conducted with computer simulation. While Reserve Force units will not practise Level 5 and 6 field manoeuvre training, there should be opportunity provided for Reserve Command and Staff training at Level 6. Level 6 training culminates in a BG field training exercise (FTX), which includes force-on-force WES training events. Level 6 field training will be directed in the SORD, and units will receive an ammunition package and a resource envelop to effect such training. Training in Level 7 is also focused on combined arms skills. Both Levels 6 and 7 represent the LOC required for employment in combat operations.

26. **Level 7** training (using BTS suffix G in the BTS manuals) will extend to include training at higher formation levels, to ensure continued Army competency in brigade group operations, including deep operations and operations in complex joint and combined endeavours, and cognition of command and staff skills at echelons above brigade.

| LEVEL OF TRAINING | LEVELS OF CAPABILITY | |
|---|---|---|
| | MLOC | ELOC |
| **Level 7**<br>(Bde) | -Bde Comd and Staff Procedures (Letter G Series)<br>-Formation Tactics | |
| **Level 6**<br>(BG and unit) | -Unit Comd and Staff Procedures<br>-BG BTS (Letter F Series) | -Unit Comd and Staff Procedures (BTS 1002 Letter F Series) |
| **Level 5**<br>(Cbt Team) | -Cbt Team TTP and BTS (Letter E Series) | |
| **Level 4**<br>(Sub-unit) | -Company/ Squadron/Battery TTP and BTS (Letter D Series)<br>-Arty Regt Trg BTS (Letter D-F Series) | -Company/Squadron/Battery TTP and BTS (Reserve Letter D Series)<br>-In a Company/Squadron Group Context |
| **Level 3**<br>(Tp/Pl) | -Troop/Platoon TTP and BTS (Letter C Series) | -Troop/Platoon BTS (Reserve Letter C Series) |
| **Level 2**<br>(Sect/Det/Crew) | -Team/Crew/Det/Sect Weapons and Tactics and BTS (Letter B Series) | -Team/Crew/Det/Sect Weapons and Tactics and BTS (Reserve Letter B Series) |
| **Level 1**<br>(Indiv) | -Indiv QS Trg<br>-IBTS | -Indiv QS Trg (Res)<br>-IBTS (Reserve) And "Delta" Trg |

**Figure 2-8. LOC and Level of Training Relationships**

| State of Readiness | Component | Level of Capability | Levels of Training | Unit Personnel Strength | Unit Equipment Status | Notice to Move Timing |
|---|---|---|---|---|---|---|
| **Reduced** | Regular | MLOC | 1-4 | < 90% | <85% | >180 Days |
| | Primary reserve | ELOC | 1-4 Reserve | <90% | <85% | >180 Days |
| **Normal** | Regular | MLOC | 2-7 | >90% | >85% | 30-180 Days |
| | Primary reserve | ELOC | 1-4 Reserve | >90% | >85% | 90-180 Days |
| **High** | Regular and Special Force | MLOC | As assigned levels 4-7 | 100% | >95% | 30 Days or Less |

**Figure 2-9: Relationships Between Readiness Measurements**

27. TMST, including domestic operations training, may be included in any of the seven levels and directed in the SORD or in subsequent training directives. Training of Land Force Area (LFA) Headquarters as joint task force headquarters for domestic operations should occur annually. As this is a joint training activity, it is not formally included in the seven levels, but may well be a Level 7 event. Training guidelines and resources for domestic operations should be planned between the respective LFA HQs and Directorate Land Force Readiness (DLFR) and included in the SORD.

## SECTION 5
## CONCLUSION

28. All Army training is conducted progressively through the levels of training to produce the assigned LOC. The LOC/level of training measurements facilitate more detailed analysis of unit readiness states, including units of the Reserve Force or mobilized forces. In this manner the Army will hold a portion of its force as operationally ready (or deployed), a portion of its force training to become operationally ready (training to MLOC 5/6/7) and a portion supporting training and conducting lower-level training (MLOC/ELOC Level 1-4). Figure 2-10 illustrates the relationship between LOC in greater detail, and Annex A provides Army application of the managed readiness concept.

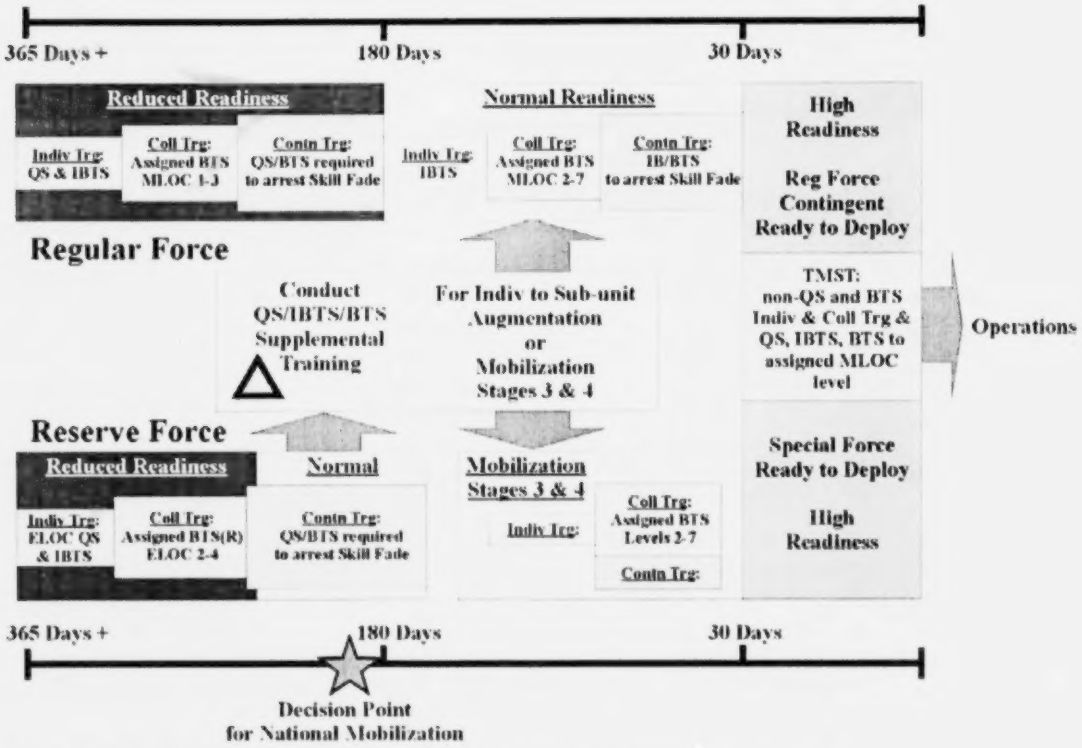
365 Days +
180 Days
30 Days
Reduced Readiness
Indiv Trg: QS & IBTS
Coll Trg: Assigned BTS MLOC 1-3
Contn Trg: QS/BTS required to arrest Skill Fade
Normal Readiness
Indiv Trg: IBTS
Coll Trg: Assigned BTS MLOC 2-7
Contn Trg: IB/BTS to arrest Skill Fade
High Readiness
Reg Force Contingent Ready to Deploy
Regular Force
Conduct QS/IBTS/BTS Supplemental Training
For Indiv to Sub-unit Augmentation or Mobilization Stages 3 & 4
TMST: non-QS and BTS Indiv & Coll Trg & QS, IBTS, BTS to assigned MLOC level
Operations
Reserve Force
Reduced Readiness
Indiv Trg: ELOC QS & IBTS
Coll Trg: Assigned BTS(R) ELOC 2-4
Normal
Contn Trg: QS/BTS required to arrest Skill Fade
Mobilization Stages 3 & 4
Indiv Trg:
Coll Trg: Assigned BTS Levels 2-7
Contn Trg:
Special Force Ready to Deploy
High Readiness
365 Days +
180 Days
30 Days
Decision Point for National Mobilization

**Figure 2-10: The Levels of Capability / Levels of Training and Operational Readiness**

29. Army training is designed to meet the operational readiness requirements of the Army and to ensure that the Army maintains a credible degree of professional competency across the full spectrum of conflict. Canada's Army understands the importance of maintaining a combat capability. War fighting skills remain the foundation of our individual and collective training systems (QS and BTS) and help to ensure that the Army retains its proper focus to meet the requirements of the future conflict environment.

30. The application of this war fighting focus in a systematic manner, while at the same time meeting operational readiness requirements, is a great challenge. The use of a Readiness Model with specified Levels of Capability associated with force generation phases creates a manageable systems approach. Defining training in terms of levels and stages helps to focus individual and collective training efforts.

31. There is a critical link between training and operations, and there is a need for a systems approach to ensure that the link is kept direct and relevant. Understanding this, the following chapters will be dedicated to presenting detailed information on how the Army's training systems strengthen the training-operations link. Specifically Chapters 3, 4, 5 and 6 introduce the Army's Professional Development model, the individual and collective training systems and the Reserve training model. These chapters describe how these systems provide Canada with combat capable, multi-purpose forces whose knowledge and skill in general war fighting is as reliable as their ability in humanitarian operations.

# CHAPTER 3
# TRAINING CONCEPTS

> *It is the present writer's impression, however, that the Canadian Army also suffered from possessing a proportion of regimental officers whose attitude toward training was casual and haphazard rather than urgent and scientific: like the traditional amateur actor, they were cheerfully confident that it would 'be all right on the night' without their having to extend themselves too much.*
>
> —**Col C.P. Stacey, *Official History of the Canadian Army in the Second World War***[3]

## SECTION 1
## INTRODUCTION

1. Military training must produce highly cohesive units. Unit cohesion is derived from good leadership, a common understanding of doctrine, uniform training standards and operational procedures, and a collective identification with the higher purpose of any task or mission. Cohesion is manifested as a shared understanding of a higher intent. Such an understanding allows for the effective and rapid execution of low-level collective battle skills in accordance with the intent of the higher commander. For this to occur, commanders must be able to depend on each crew, detachment and section to perform its battle tasks under any condition. Conversely, crews, detachments and sections must be able to depend on their leaders to command effectively under the same conditions. When mutual competence is acknowledged between commanders and teams, cohesion emerges. This dynamic is the same regardless of the commander/subordinate level. Complete unit cohesion cannot, however, be reached in one step: it must be built incrementally and systematically through years of professional development and training at successive levels in preparation for operations. The role of the commander in this development and training is paramount. To be able to successfully create cohesive units, the commander must possess a comprehensive knowledge of the Army's Professional Development and training systems and concepts.

2. This Chapter describes the *concepts of training* that comprise this systematic approach. It introduces the Army's Professional Development model, which has an integrating function between the Army's individual and collective training systems and the on-going operations cycle. This chapter defines the components of professional development—training, education, experience and self-development—in the context of individual, collective, and continuation training and operations. Specifically, this chapter addresses how an individual's professional development is achieved in the various types of training conducted within the Army and the need for balanced training.

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[3] While careful not to refute Stacey's claim, John English convincingly blames Canadian high command for this poor state. High command simply failed to teach these officers how to train. See John English *Failure in High Command*, The Golden Dog Press, Ottawa, 1995, p. 136.

3. One must always keep in mind that the Army's training systems continually attempt to satisfy two, sometimes opposing, imperatives: the need to meet current and projected operational commitments, and the need to ensure that the professional development of the Army is focused on war fighting. The individual training system is founded on the need to train individuals to deal with the realities of combat in general war. The collective training system builds on this foundation to train as much as possible with a war fighting focus and, at the same time, ensures that theatre and mission-specific training (TMST) occurs so that forces are ready to meet the demands of various forms of peace support missions. The different forces exerted upon the systems to meet both long-term professional health and current operational needs must be balanced in such a way as not to impede unity of purpose throughout the Army. This chapter attempts to educate in this regard.

## SECTION 2

## ARMY PROFESSIONAL DEVELOPMENT

4. Professional development can be seen as a systematic process in which a Canadian citizen is transformed by the organization into a military professional. This developmental process imparts and integrates knowledge and skills unique to the leadership and management of armed forces in war and peace, referred to as military art and science, for both officers and soldiers. Professional development thus provides units with qualified individuals who can perform assigned duties, which increase with experience, rank and time in uniform. Cumulative individual service ensures that the process, from an individual's perspective, never ceases and builds incrementally upon past training, education and employment experience. Professional development, therefore, involves all aspects of individual training and education, collective training and operational experience.

5. The professional development systems for officers and soldiers are highly integrated processes that encompass the full development of individuals to meet, firstly, the general requirements of membership in the CF, secondly, the specific requirements of employment in the land environment and, finally, the unique requirements of specific MOCs. The professional development systems are designed to satisfy these various requirements as they are stated in the general, environmental and occupation specifications for both officers and soldiers.

6. Specifications describe the common tasks, skills and knowledge required by an individual so that they may contribute to the performance of the CF and the Army. The general specifications (GS) describe the requirements of all CF personnel, while the land environmental specifications (LES) describe the requirements of all Land Force personnel. Occupation specifications (OS) describe the requirements of a particular occupation (e.g., infantry soldier or administration clerk) and occupation specialty specifications (OSS) describe the specialized requirements of a sub-section of that occupation (e.g., sniper skills within the infantry soldier occupation).

7. The specifications reflect the envisioned realities and demands of current and future operations, the changes that have affected the profession of arms and other expectations placed upon Canada's Army. The Army specifications (LES, OS and OSS) are derived from the Army's appreciation of war fighting skills and knowledge. They outline the common tasks that

all officers and soldiers must be capable of performing, to a prescribed standard, in both combat and non-combat environments.

8. The nature of the military profession is such that, as officers and soldiers progress in rank, their capabilities must be developed to meet the demands and broader responsibilities associated with increased rank. The relatively narrow focus of skills and perspective associated with the limited responsibilities at the beginnings of a military career must, with time, be expanded to include a greater breadth of perspective, increased skills for in-depth problem assessment and the broader professional judgement needed to deal with increasingly complex issues. Accordingly, the professional development systems have been designed to meet the unique developmental needs of all officers and soldiers. Career progression, described by developmental periods (DP), is defined by rank. In this way, the training, education, experience and self-development requirements (as defined by the GS , LES and OS) are explicitly outlined and encapsulated within given developmental periods. The professional development systems, therefore, ensure that the appropriate inculcation of professional skills remains commensurate with the requirements of the individual's rank. For Regular and Reserve Force officers and NCMs, the rank breakdowns for the DPs are distinct. They are as follows:

a. **Officers**:

   (1) DP 1—Ocdts and in some cases 2Lt;

   (2) DP 2—2Lt, Lt, Capt;

   (3) DP 3—Maj, LCol (DP3a and DP3b distinguish between these rank levels); and

   (4) DP 4—Col, General Officers;

b. **NCMs**:

   (1) DP 1—Pte (R);

   (2) DP 2—Pte (T), Cpl;

   (3) DP 3—MCpl, Sgt;

   (4) DP 4—WO, MWO; and

   (5) DP 5—CWO.

9. Each DP includes the GS, LES, OS and OSS that explicitly outline the training, education, experience and self-development requirements to be achieved by the individual officer or soldier. Thus, development exists as a continuum. Training, education, experience and self development occur in a progressive manner that builds upon and expands the experiences of the previous DP to enhance the professional abilities of the individual. Not all individuals will progress through each DP, for any number of reasons, but professional development opportunities nevertheless continue unabated in a given DP level. This situation exists because the scope of activities that can be considered under the rubric of professional development are unlimited.

10. Building a professional development system also requires the construction of several other key components. The professional development systems for officers and soldiers comprise key policies that prescribe how an individual will progress through a given DP. Policies outline the processes and the command and control structures of the systems. They describe how change will be effected to ensure the future validity of the systems. The policies of the developmental systems also contain general sections on career management, fitness, medical, terms of service and unlimited liability.

11. Army professional development policies are set by the Army Professional Development Senior Review Board, chaired by Commander LFDTS. The professional development systems will be delivered to officers and soldiers through the Professional Development System Policy Framework. This framework is represented here as a "temple" that includes a series of "pillar" activities. Such activities are incorporated into each DP to ensure that they act in concert to define the methods by which the individual is developed so that he is able to perform his assigned duties.

12. The four pillars of the PD System Policy Framework are defined as education, training, employment experience and self-development. Each of these pillars contributes to the professional development of officers and soldiers in varying degrees throughout their careers as the expression of the methodology by which they are to be developed. Each pillar is dependent upon the others since one pillar is incapable, on its own, of imparting all the necessary attributes required by a military professional.

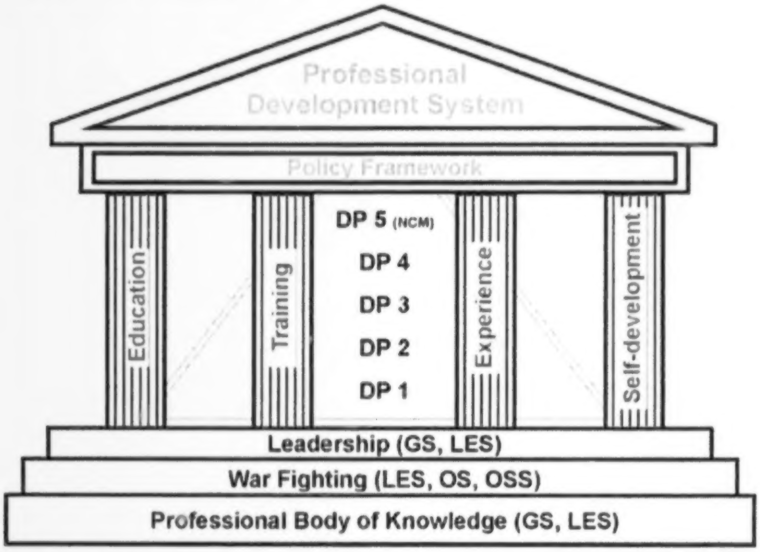


**Figure 3-1: Army Professional Development**

13. Education is the provision of a base of knowledge and intellectual skills with which information may be interpret reasonably and sound judgement exercised; it is the development of a reasoned response to an unpredictable situation. Education contains two components: academic and professional military. Both of these components act in concert to expand and refine the individual's knowledge base and enhance his cognitive functioning. Through the progressive development of the individual's education at both civilian and military institutions,

that person is better able to understand his chosen profession, the global security environment and what to expect in unfamiliar operational situations.

a. Training is the provision of the technical and procedural knowledge and skills required in the performance of assigned duties; it is the development of a predictable response to a predictable situation. Training is the continual process that each individual officer and soldier will experience throughout his career. Typically, training is based on occupational need and, as such, must correspond to the duties that officers and soldiers are expected to perform as delineated by their respective specifications and qualification standards. Through this sequential and progressive process, training enables individual officers and soldiers to develop their functional, technical, tactical and leadership competencies so that they are capable of performing their assigned duties.

b. Experience reinforces education and training. The programme of training provided by the Professional Development System is unable and not expected to provide every competency at the required level that officers and soldiers require to be successful in their duties. Some skills can only be learned or reinforced through practical and/or operational experience—this is particularly true of skills associated with operations and leadership. The military profession must be exposed to practical and/or operational experiences as many of the skills associated with such experiences cannot be learned or reinforced in a classroom setting. Only through the accumulation of relevant, tough and challenging military experience can officers and soldiers expect to become true military professionals.

c. Self-development involves the efforts of individuals to further develop themselves above and beyond that professional development which is provided for them by the organization. In areas related to the profession of arms, officers and soldiers are expected to undertake self-directed education, training, or experience to enhance their personal and professional abilities. Self-development is a progressive and sequential process that consists of individual study, research, professional reading, practice and self-assessment. All officers and soldiers are expected to follow a regime of self-development, focussing on the profession of arms and their own career requirements. Through self-development efforts such as these and others, individual officers and soldiers will enhance their military professionalism.

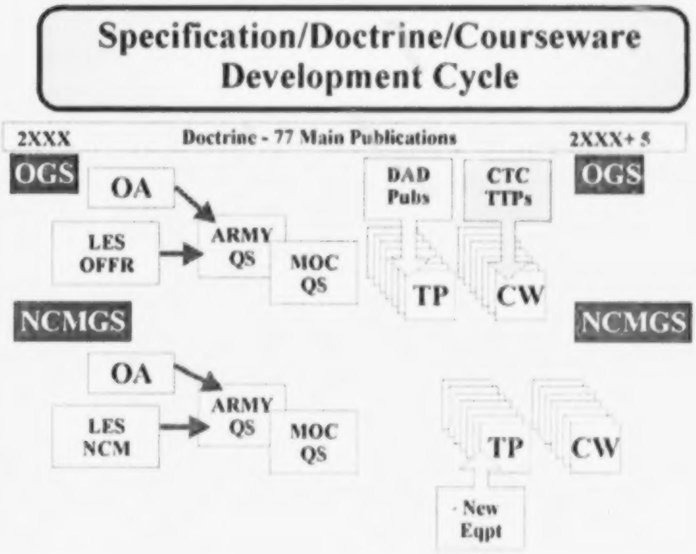
14. The Reserve Force will also follow this professional development model. There will, however, be differences in emphasis for each pillar. The Reserve Force must, because of time and resource constraints, emphasize training that helps in acquiring necessary military experience. It is incumbent on the individual Reserve officer and soldier to find the right personal balance between training, education and self-development.

15. History has shown that military professionals must possess certain attributes, including, but not limited to, tactical competence, adherence to the military ethos and leadership. Without the complete inculcation of these attributes, officers and soldiers of Canada's Army will not be able to succeed in their future endeavours. It is the intent of the professional development systems of the Army to imbed these attributes in its officers and soldiers so that they can become adept in the profession of arms and realize the trust bestowed upon them by the Canadian people. It is only through the application of education, training, experience and self-development that

members of Canada's Army can obtain the proficiency that will be demanded of them now and into the future. The officer and soldier professional development systems will achieve this lofty goal by setting the path for the development of all individuals in the Army, from the beginning of their careers to the end. In this way, the officers and soldiers of the future may continue to be leaders, warriors and professionals.

## PROFESSIONAL DEVELOPMENT AND ARMY TRAINING STANDARDS

16. The Army professional development systems, which incorporate the Army's individual training system, is built upon CF, environmental and occupational specifications and their related qualification standards. Specifications will be reviewed and updated periodically to ensure their continued relevance to training. The review process is called an occupational analysis. Such an analysis should be linked to doctrinal reviews and should accommodate the acquisition of new equipment and technologies. The conduct of specification reviews must include Reserve Force representation in order to ensure a common basic standard between the two components from which augmentation and mobilization planning can occur. The result of reviews will include changes to qualification standards, course training plans and coursewares. All this review and change takes time. Therefore, the professional development systems now operate on a five-year developmental cycle between reviews. This timeline ensures some stability in training curricula and allows for a degree of synchronization between the Army's doctrine production and training systems to ensure that individuals are being instructed in the most up to date procedures. Five-year cycles also make professional development more manageable and allow individuals to receive maximum opportunity to undergo sound training, to receive educational courses, to gain experience in training and operational environments, and to have scope for self-development.



**LEGEND**

OGS - Officer General Specification
LES - Land Environmental Specifications
OA - Occupational Analysis (Combat Arms)
MOC - Military Occupational Classification
NCMGS - Non-commissioned Officer Specifications
QS - Qualification Standards
TP - Training Plan
CW - Courseware

Figure 3-2: Professional Development Cycle

17. Collective training is an essential component of professional development. To achieve cohesion and consistency in training, there must be common standards that govern participation. In the collective training system, battle tasks have the same role as specifications do in individual training, and battle task standards mirror that of qualification standards. Army doctrine explains the operations of war and how they will be carried out. Battle Tasks take these operations and divide them into component tasks, explaining the time and accuracy standards and the conditions that define success in each task. In effect, battle task standards actualize military doctrine; they are the fundamental building blocks of collective training.

18. Battle task standards, like qualification standards, provide an operational measure against which effectiveness and efficiency of collective training is gauged. It is important that BTS remain relevant and, like the individual specifications described above, are reviewed in the light of current and future trends in warfare. Such reviews are conducted as battle task working groups, comprised primarily of field force personnel, with Reserve Force representation. They derive battle task standards (Regular and Reserve) directly from doctrine. An Army training subject matter expert (SME) leads each working group and subsequently maintains the document in its finished form. Changes to battle task standards are initiated through the Army lessons learned process, post exercise reports or through Commanders' directives. The SME co-ordinates all changes to primary and supporting publications once a change is approved. It is important to stress that battle task standards evolve in response to operational and training feedback through the Army's combat development process. For this reason, users are encouraged to ensure that the versions of BTS publications they are using are current by either contacting the Directorate of Army Training directly or by referring to the Army Electronic Library on the Land Force Doctrine and Training System DIN site.

19. The review process for BTS is established in a five-year doctrine cycle and is related to the specification developmental cycle. The alignment of doctrine with the individual and collective training standard development cycles is important to professional development as a whole. A degree of stability is necessary to ensure that the professional development of individuals is enhanced by training, education and employment experience that is understood and measured by common standards of performance.

## PROFESSIONAL DEVELOPMENT, ARMY TRAINING AND OPERATIONS

20. With this explanation of professional development—using the terms specifications, developmental periods, qualification standards and battle task standards—it is hoped that the reader will understand the inextricable link between the Army's individual and collective training systems and how these effect professional development. What remains to be addressed is the linkage between professional development, training and Army operations. This linkage is depicted in Figure 14, which illustrates professional development through an integrated "system of systems." The training systems—individual and collective—follow a process referred to as the Army's System Approach to Training (ASAT). The ASAT comprises six phases, the details of which are described in Chapters 4 and 5. The individual training system, using ASAT, produces qualified personnel whose skill and knowledge are validated during collective training

events and on operations. Within the collective training system, commanders select individuals for courses and later integrate those qualified personnel into tactical groups (teams, crews, troops, platoons, etc.) to undergo collective training in order to produce cohesive and combat-capable units. These units may then be employed during the operations phase of the force generation cycle. As individuals complete training and operations, they acquire more of the skill, knowledge and experience needed to progress through their DP and become eligible for selection to the next.

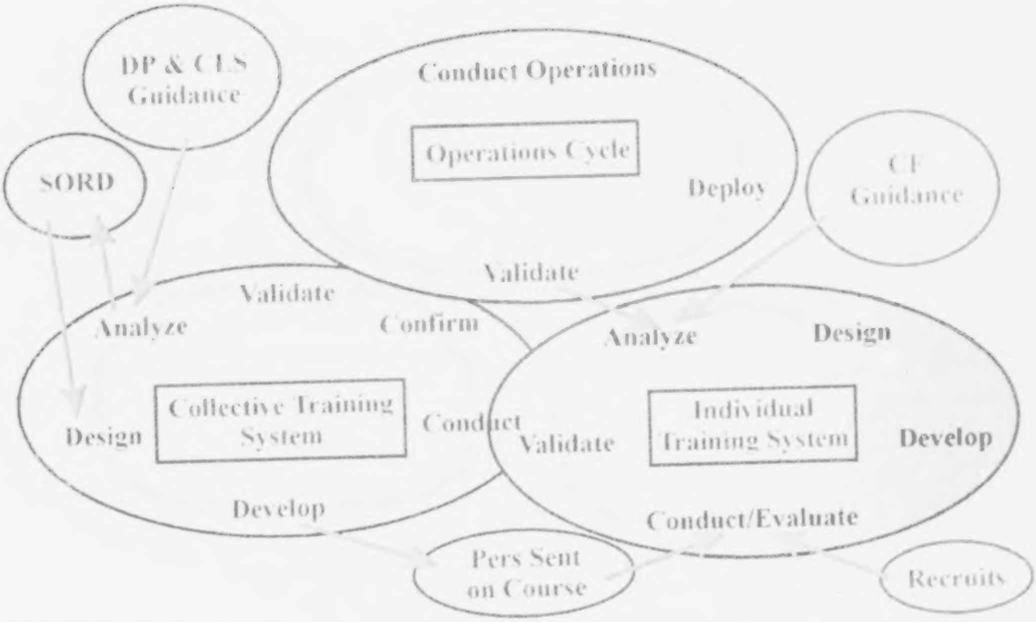


Figure 3-3: The Integrated Professional Development System of Systems

21 The integrated systems approach illustrated above, working on ASAT principles, is the best way to ensure that operations are supported by a robust training structure that has depth and regeneration potential. It is designed to produce highly qualified professionals, grouped into cohesive and well-trained tactical organizations that, in turn, are ready to deploy on operations. It is also the structure to be used to expand the Army to meet the needs of Mobilization Stages 3 and 4. The tempo at which the "system of systems" operates will depend upon operational requirements and systems management.

22 Operational requirements are determined by the Joint and Land Staffs at NDHQ. Systems management is an operational level function that resides largely with the Land Force Doctrine and Training System. Commander LFDTS is the Army's authority on all training aspects of this integrated "system of systems" and is responsible for the management of ASAT within both individual and collective training to ensure that strategic requirements are met. Commander LFDTS's primary responsibility is in the application of common training standards – qualification standards and battle task standards – that guarantee the long term

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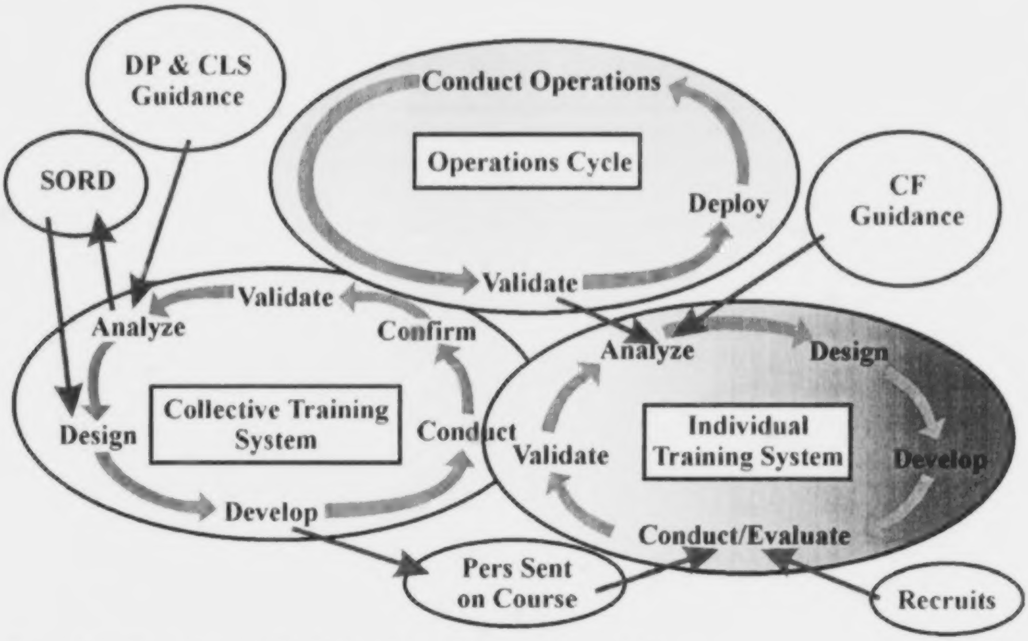

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professional health of the Army and ensure the maintenance of a critical combat capability. Commander LFDTS is also concerned with the quantity of training that occurs and its relevance to ongoing and future operations. In this he will work with field force operational level headquarters to ensure that the force generation cycle is being adequately supported by Army training. As well, Commander LFDTS is charged with the continual improvement of Army training and is responsible for ensuring that institutional learning is effected.

23. Tactical level commanders will conduct training and operations. They will be responsible for the application of standards in training, the formation of cohesive, combat-capable forces and their employment on operations. Theirs' is the most critical of functions. They have leadership and management responsibilities in both the individual and collective training systems, they are charged with the professional development of subordinates, and they hold the unequalled challenges of operational command. The training and force generation systems, therefore, must be designed and managed to best support tactical level commanders.

24. Army training, professional development, force generation and operations are inextricably linked and must be managed with a top-down systems approach. Tactical commanders work within the systems to best organize and prepare their soldiers for the demands of combat. They will succeed in this endeavour by developing and conducting balanced training plans that incorporate as many types of training as possible to ensure operational readiness and professional development.

## SECTION 3
## THE BALANCED TRAINING FRAMEWORK

25. Soldiers must have individual competencies that foster self-confidence and the trust of other soldiers. Such competencies are achieved through individual training and professional development. Similarly, teams, crews, sections and higher organizations must have competencies that allow them to perform tactical tasks effectively as part of larger groupings and units. Collective competencies are the product of collective training. Both individual and collective competencies require deliberate practice in order to prevent skill-fade and to allow for progression toward more advanced understanding and skill. Continuation training is used to practise and to build upon skills learned in individual and collective training. The following paragraphs explain these three categories further:

a. **Individual Training**. Individual training is the training that prepares each officer and soldier to fulfil his individual role on operations, as part of a team or group. It comprises formal institutional individual training and professional development. It produces self-confident, disciplined soldiers and leaders who are physically fit, well motivated, and who possess the necessary skills and knowledge to perform the duties assigned to them. Individual training is distinct because it imparts new skills, knowledge and attitudes to individuals, and it normally results in a qualification being conferred.

b. **Collective Training**. Collective training practises the application of doctrine, in the form of tactics, techniques and procedures (TTPs), in tactical situations. Collective training focuses on producing cohesive combat-capable tactical groupings and involves the execution of battle tasks in realistic training scenarios. Individual leader participation here is a vital component of professional development. Collective competencies rely upon aggregate individual competencies of unit members and leaders.

c. **Continuation Training**. Continuation training practises individual and collective skills in order to prevent the erosion of skills not regularly practised at higher levels in the progression of training. For example, precision gunnery skills cannot be incorporated into all exercises; thus, tank and anti-tank gunnery skills erode while the unit progresses through the higher levels of training. Therefore, tank gunners, LAV III gunners, anti-tank gunners and air defenders must continue to practise these skills, especially when their units deploy to locations where these skills are not routinely employed.

26. To create cohesion throughout an entire unit, there must be a balance between the three categories of training. The correct balance exists when the appropriate type and amount of individual training is conducted to enable the force to successfully undergo the required collective training, and the acquired individual and collective skills and knowledge are sustained through the appropriate amount and type of continuation training.

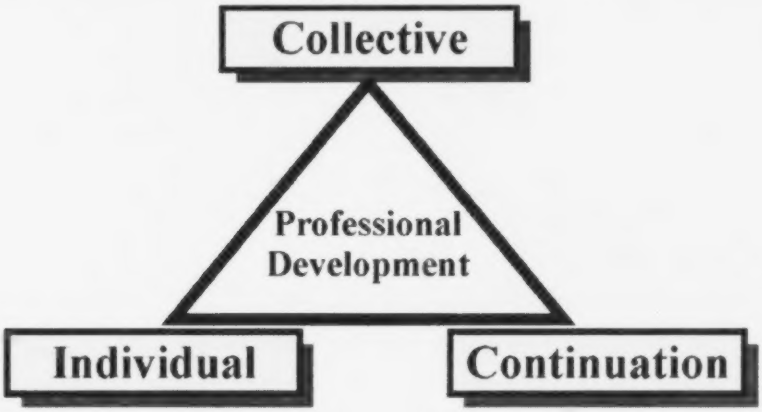

**Figure 3-4: The Training Balance**

## SECTION 4
## TYPES OF TRAINING

27. Nine distinct types of training have been identified within the three categories of training presented above. Each one contributes to professional development of the operational capabilities of a unit.

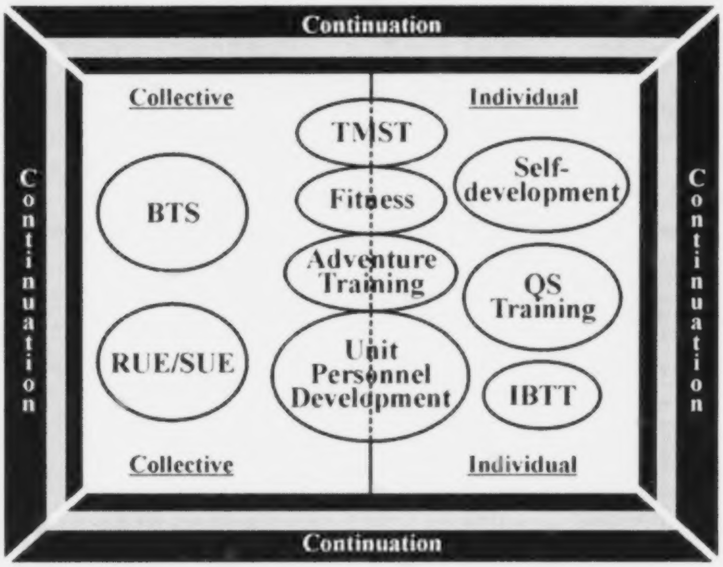

**Figure 3-5: Types of Training**

## QUALIFICATION STANDARDS TRAINING

28. Qualification standards (QS) training is a major component of the individual training system. The aim of QS training is to ensure that the required number of trained soldiers and leaders are available to maintain established manning and qualification levels in Army units. The competent and capable performance of individuals is the foundation of unit performance and underpins cohesion. QS training, as a component of individual training, imparts new skills, knowledge and attitudes to individuals, and results in a qualification being conferred. The standards to be achieved are articulated in the performance objective statements in the applicable qualification standard documents. While QS training achieves training objectives, it does not satisfy the non-quantifiable education objectives of professional development.

29. QS Training includes formal leadership and command training courses based on the CF GS and the Army LES. It is a critical component of professional development and is directly tied to advancement from one developmental period to another. Commanding officers have a responsibility to manage subordinates in such a manner that they are prepared for critical QS training, that they are made available for such training, and that, once completed, the individual has every opportunity for employment experience that best utilizes new skills and knowledge. Therefore, while QS training is formally managed by the Army's training authorities under LFDTS, it relies heavily upon field force commanders for its effectiveness. The proper unit employment of qualified individuals ensures that their knowledge and skill are being utilized and developed further through interaction with subordinates, peers and superiors during collective training and operations.

## UNIT PERSONNEL DEVELOPMENT TRAINING

30. Professional training and education have two aspects: formal and informal. Formal education and training provides the intellectual framework for problem solving and decision making. While such training includes leadership and career qualification standards training, there is also a requirement for internal-to-unit personnel development training that is conducted to benefit soldier and leader development.

31. A good example of unit personnel development training is command and staff training in the operational decision-making process. This training is designed to produce commanders and staffs capable of successfully directing operations under any conditions. It has both individual and collective training components. For individuals, command and staff training imparts the requisite skills and knowledge to act in various command and staff appointments at the appropriate stage in the individual's career. It also educates the individual in the command culture of the Army and of that unit. It is linked inextricably to both qualification standards training and collective BTS training.

32. Collective command and staff training activities aim to enhance the decision-making ability of a specific commander and staff. This training assumes that all members of the target audience (the staff to be trained) are appropriately qualified for the positions they occupy. The preferred medium for command and staff training is formal computer-based simulations.

33. Other forms of unit personnel development training include locally run classes on moral issues (e.g., SHARP), community relations, communications and media skills, and military history. The latter is of particular importance; it fosters an interest in the profession of arms and the conduct of war through the critical study of past battles and campaigns. To this end, leaders may employ battlefield tours, tactical exercises without troops (TEWTs) and study days to stimulate professional interest, promote an understanding of the realities of war and widen military perspectives. The outcome is leaders who accept responsibility for their own life-long learning and professional education so that they, in their turn, become the informed educators and leaders of future generations.

34. Unit personnel development training aims to produce leaders who, through their personal example and moral influence, can inspire subordinates to exert supreme personal effort in the performance of complex, often dangerous tasks. Such training focuses on the development and enhancement of character traits, ethics and values that, when coupled with military ethos, produce natural leaders that soldiers will follow, even under the most adverse conditions. Selection of the right candidates for such training is an essential responsibility of command.

## SELF-DEVELOPMENT TRAINING

35. While commanders have an obligation to train subordinates in-house, they must also provide room for individual self-development training. This training primarily occurs in the realm of education through academic courses, but it may also include participation in individual non-military training or education opportunities or participation in training or education with foreign armies. This component of professional development aims to provoke both intellectual

and character growth. It is best managed by the individual in conjunction with his superiors, but it must also be monitored. Once a set of self-development goals has been met by an individual, the unit commander should receive feedback about its worth and applicability so that opportunities for the individual to use the skills and knowledge he has gained may be provided.

## FITNESS TRAINING

36. Fitness training has a twofold benefit. It enhances individual physical fitness and health, thereby producing a more self-confident and physically able soldier. Because fitness is a critical component in an individual's ability to deal with the physical and mental demands of operations, the physically fit soldier is, in effect, more operationally capable. Fitness training is also an excellent vehicle for the creation of unit cohesion. Collective participation in a progressive but rigorous physical regime and the collective achievement of a high physical fitness standard will foster a strong sense of team identity. The proposed Army Fitness Manual (B-GL-382-003/FP-001) presents a 12-week training programme designed to prepare soldiers and units for the Army Fitness Standard (AFS). Once this publication is approved, commanders must implement this standard and ensure that properly administered fitness training is conducted during individual, collective and continuation training to meet this standard.

## INDIVIDUAL BATTLE TASK TRAINING

37. Individual battle task training includes those training activities that impart the common knowledge and skills, and the ability to perform the common tasks, required by every soldier to ensure combat survival and individual contribution to mission success. The standards to be achieved, the frequency of practice and the resources required are defined in the individual battle task standards (IBTS). These standards must be consistent with the performance objective statements in the applicable qualification standard.

## COLLECTIVE BATTLE TASK STANDARDS TRAINING

38. Collective battle task standards training is the process that converts a group of soldiers possessing individual battle skills into a cohesive combat-capable unit. BTS training aims to develop disciplined all-arms teams that are cognisant of a mutually understood higher intent. Corps, branch and combined arms battle task standards articulate standards to be achieved in a flexible environment where the conditions can be adjusted by the commander organizing the training.

## RUE/SUE TRAINING

39. Because it will not always easily conform to BTS rationalization, reciprocal unit exchange (RUE) / small unit exchange (SUE) training is considered as a separate type of collective training. RUE and SUE opportunities may be allocated to units to reinforce specific collective BTS training and relate to assigned SORD tasks, or they may be allocated as a means of providing scope for unique sub-unit training with foreign armies. The benefits of RUE/SUEs

are tremendous: they provide exposure to different ideas and methods of operations, they allow comparison of soldier and group skills between armies, they reinforce the sub-unit chain of command by providing greater responsibilities to sub-unit commanders, they enhance morale by giving the soldiers a different training opportunity with comrades-in-arms from other nations, and they provide feedback on inter-operability capabilities.

## ADVENTURE TRAINING

40. Adventure training brings soldiers together in challenging environments where cohesive team building is essential and individual knowledge, skill and self-confidence grow. With imagination and good planning, this training can be conducted with relatively little expense, yet still remain a superb way to forge small-group cohesion and enhance small-group leadership. Few other Army training events can so adequately address the moral issues of leadership, team building and character development as can adventure training conducted in challenging environments. Adventure training helps individuals to transcend the gap between training and education: it forces individuals to use the abilities and skills learned on courses—where predictable outcomes were measured—by adapting and developing them further to meet the demands of unpredictable and uncertain circumstances. In this regard adventure training is a valuable professional development tool. The guidelines for the conduct of adventure training are found in DAOD 9-58 and LFCO 23-02. While currently seen as an adjunct to Army training, there is scope for inclusion of adventure training into Army specifications during future specification reviews. Commanders should seek every opportunity to plan and conduct such training.

## THEATRE AND MISSION-SPECIFIC TRAINING

41. Theatre and mission-specific training (TMST) addresses specific mission requirements not covered as part of war fighting (QS or BTS) training as well as QS and BTS training that needs to be reiterated under specific conditions. TMST includes combat related tasks such as rules of engagement (ROE), specific environmental survival skills and non-combat skills such as negotiation techniques and languages. The mission and the environment dictate TMST. However, for known Defence Plan commitments, TMST packages are designed and delivered as part of normal collective training for missions. Domestic operations training is also included under TMST.

42. Such training may take place before deployment, in-theatre or both. TMST will normally focus upon acclimatization, tasks prevalent in a particular theatre of operations (including inter-agency work) and cultural familiarization to enhance understanding of the environmental, political and social conditions there. TMST is conducted after general-purpose, war-fighting BTS training occurs to the assigned level (e.g., MLOC 4) in the applicable training phase and may include reiteration of such training. The key deductions from the commander's training estimate and the CLS training guidance for the mission will dictate the type and intensity of TMST needed to meet the mission requirement. It should be noted that environmental factors such as extreme heat, cold and/or altitude must be introduced under the guidance of the

competent medical authority and in accordance with the applicable environmental operations manuals.

## SECTION 5
## TRAINING ON OPERATIONS

43. While not one of the nine distinct types of training outlined above, training whilst on operations is very important. Training does not cease once deployment or operations have begun. Individual and collective skills are subject to deterioration, thus training on operations should always seek to reduce skill-fade and improve performance. As an example, current CF mine strike data shows that most Canadian casualties have occurred during the third or fourth months of a tour. Frequent and specific mine-awareness refresher training must be programmed in order to reduce such casualty rates.

44. In-theatre training also prevents boredom, raises morale and enhances unit cohesion and operational effectiveness. As well, on certain peace support operations, training conducted in view of belligerent forces—particularly live fire training using all-arms weaponry—may have a positive impact, deterring potential belligerent aggression, upon the mission itself. The extent of the training will be largely determined by the higher commander's intent, the tension in theatre and the time and training resources available.

45. Certain general-purpose combat skills—such things as Level 2 crew skills, TOW and tank gunnery skills, and tactical decision-making skills—can fade quickly and require frequent practice. To reduce skill-fade, simulations should be used whenever possible. While it is not possible to arrest all the dimensions of skill fade on operations, it is the responsibility of operational commanders to assess where skill fade will occur and implement training measures to mitigate the risk.

## SECTION 6
## DOMESTIC OPERATIONS TRAINING

46. The Army has always responded to requests for assistance from the constituted authorities of Canada. While domestic operations are not the primary focus of the Army, Army commanders must plan for such operations and Army personnel must train for them. The scope and extent of that training is largely dependent upon local realities. Domestic operations training will, therefore, be considered as TMST.

47. The Chief of the Defence Staff may designate a Land Force Area (LFA) commander as the on-site commander in certain domestic operations. In this capacity, the LFA commander is responsible for the operational level plan, the synchronization and the sustainment of assigned forces. Such operations require commanders at all levels to maintain liaison with federal, provincial and municipal police and civil authorities (and other departmental representatives as necessary) and to coordinate plans to maintain community relations and facilitate operations.

48. As well, certain domestic operations skills (e.g., the establishment of a cordon and an incident control point) may require maintenance through continuation training. The LFAs must

retain an immediate response unit that has some resident knowledge and skill in domestic operations plans and activities.

49. The assignment of domestic operations training tasks and the allocation of training resources will follow the same guidelines as TMST and will be an iterative procedure involving LFA commanders and the Directorate of Land Force Readiness at NDHQ.

## SECTION 7
## CONCLUSION

50. The Army requires relevancy in the training and education of its personnel to meet the operational demands of today and the challenges of the future. To this end, individual professional development profiles for the CF, the Army and for each MOC are maintained in the general, environmental and occupation specifications. Likewise, professional development is reliant upon the maintenance of Army battle task standards for collective training, which allows for commonality of thought and action between Army units, providing a standard training experience for professional development in each developmental period. The participation of the Reserve Force in both the specification and BTS review process will ensure that the Reserve Force has correctly identified those standards that can be met given the restricted time available for training.

51. The Army's training systems are integrated with Army operations cycles to facilitate the maintenance of professional standards and the sustainability of force generation capabilities. The systems attempt to discipline all Army training to provide every opportunity for each member of the Army to develop professionally over a long and successful career, while at the same time providing operationally ready forces for deployment in the service of Canadian interests. The training systems are linked together by the Professional Development model, ensuring that soldiers learn progressively through a variety of mediums. Taken as a whole, the systems help guarantee that Canadian soldiers and units are both combat capable, yet multi-purpose in character, and that there is no erosion of combat skill and knowledge within the Army over time. The Army uses a systematic approach to all of its training, referred to as the Army Systems Approach to Training (ASAT), which underpins both individual and collective training.

52. While the Army's training method is systematic, it is also reliant upon individual commanders at all levels to ensure that professional development occurs to the maximum extent possible—utilizing every type of training—and to ensure that operationally ready forces are formed and trained to the highest possible standards. The dual character of command-driven training conducted within a systems framework reinforces unity of purpose from the strategic to the tactical levels, while protecting and sustaining the professionalism of the force. These themes will be further developed in the following chapters.

# CHAPTER 4
# INDIVIDUAL TRAINING

*We must expect heavy casualties among our officers and NCOs once we are in action, therefore we train replacements now...*

—**General George Kitching**, ***Mud and Green Fields***

## SECTION 1
## THE ARMY'S INDIVIDUAL TRAINING SYSTEM

1. Individual training is conducted as the precursor to collective training. It is an essential component within Army force generation and operational readiness and must be conducted systematically. It is thus essential for those holding command and training positions to have a sound understanding of individual training.

2. The aim of the individual training system is twofold. Firstly, it underpins the professional health of the Army by facilitating individual professional development. Secondly, it ensures that the required number of trained soldiers and leaders, with the required qualifications, are available within a unit to permit progressive collective training toward a high readiness state.

3. This chapter and its related annexes cover the planning, organization and conduct of individual training within the Army's individual training system. It also provides details about the application of the Army Systems Approach to Training (ASAT), it addresses the use of simulations in training and it provides guidance for continuation training.

## SECTION 2
## THE ARMY SYSTEMS APPROACH TO TRAINING

4. The ASAT is the Army's training management model and is based on the Canadian Forces Individual Training and Education System (CFITES). CF policy states that all training and education shall be conducted in accordance with the CFITES management model.[4] The *Manual of Individual Training and Education* provides guidance on the CFITES.

5. CFITES is a management system designed to enhance the quality and quantity of training and education throughout the Armed Forces, while husbanding the resources dedicated to training and education programmes. CFITES is composed of a quality control system and a quantity control process. Each of these components incorporates resource management mechanisms.

6. The ASAT is the individual training system's management model and is designed to control the quality and quantity of resources dedicated to Army training and education. While ASAT is a reflection of the policies and processes described in the CFITES model, it has adapted

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[4] NDHQ Instruction ADM(Per) 4/94 Individual Training and Professional Development Management Framework, 31 May 1994

the CFITES model to address the unique requirements of the Army's individual training system. The objective of ASAT is to aid in the preparation of Army personnel for operations, and it shall be used to plan and conduct all individual training.

## ASAT PRINCIPLES

7. The three principles governing ASAT as a management model are described below:

   a. **Performance Oriented**. In the Army, training and education exist to prepare its officers and soldiers to successfully perform their duties in combat. All training and education must focus on the essential skills, knowledge and attitudes required to meet operational requirements.

   b. **Systems Approach**. Training and education programmes are defined, produced and maintained through an iterative and interactive series of steps, leading from the definition of a requirement to the verification that the requirement has been met.

   c. **Optimum Efficiency**. Training and education must be developed and conducted in a manner that prevents or eliminates unnecessary effort and that ensures continuing cost-effectiveness. Objectives, strategies and resource expenditures must be strictly controlled to provide individual training that satisfies operational requirements at minimum cost.

## ASAT PHASES

8. The phases of the quality control process are described as follows:

   a. **Analysis**. The purpose of the Analysis phase is to articulate the required outcome of training and education in terms of essential on-job performance. Effective analysis requires input from commanders, staff, end-users, subject matter experts and training development or educational specialists. The product of this phase is the qualification standard that describes the performance objectives to be achieved.

   b. **Design**. The purpose of the Design phase is to select or describe a learning programme and an environment that will enable the learner to achieve, in a cost-effective manner, the *performance objectives* defined in the Analysis phase. The product of this phase is the training plan that identifies the strategy and methods to achieve and assess the required training.

   c. **Development**. The purpose of the Development phase is to obtain or produce effective instructional materials that fulfil the design intent. A second purpose is to form an instructor cadre that can deliver the required training.

   d. **Conduct**. The purpose of the Conduct phase is to enable personnel to achieve the required performance objectives.

e. **Evaluation**. The purpose of the Evaluation phase is to ensure the effectiveness and efficiency of instruction. A programme is effective if the learner has achieved the performance objective(s). A programme is efficient to the extent that methods, materials, and resource expenditures are warranted.

f. **Validation**. The purpose of the Validation phase is to verify that the ASAT quality control system has adequately prepared graduates to perform the operational task or to meet specified Army goals. Validation can also identify excessive or unnecessary training and education.

## RESPONSIBILITIES FOR ASAT WITHIN THE INDIVIDUAL TRAINING SYSTEM

9. The Army's individual training system is depicted in Figure 4-1. The three CF management elements (Plan, Organize and Conduct) are presented and are related to their corresponding institutional command levels. The institutional responsibilities of the various levels are shown for each major headquarters or training establishment within the system. These responsibilities are broken down into ASAT functions (Analyze, Design, Develop, Conduct, Evaluate and Validate, as described below). The figure below illustrates the relationship between work breakdown and organizational structure for individual training in the Army.

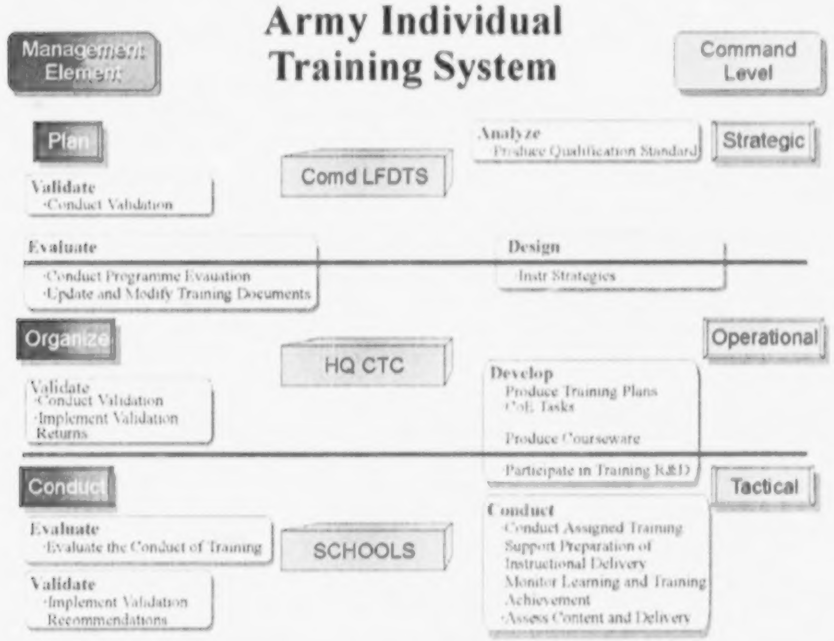
Management Element
Army Individual Training System
Command Level
Plan
Validate
·Conduct Validation
Comd LFDTS
Analyze
·Produce Qualification Standard
Strategic
Evaluate
·Conduct Programme Evauation
·Update and Modify Training Documents
Design
·Instr Strategies
Organize
HQ CTC
Operational
Validate
·Conduct Validation
·Implement Validation Returns
Develop
Produce Training Plans
CoE Tasks
Produce Courseware
·Participate in Training R&D
Conduct
Tactical
Evaluate
·Evaluate the Conduct of Training
SCHOOLS
Validate
·Implement Validation Recommendations
Conduct
·Conduct Assigned Training
Support Preparation of Instructional Delivery
Monitor Learning and Training Achievement
·Assess Content and Delivery

**Figure 4-1: ASAT Responsibilities in the Individual Training System**

10. Analysis leading to qualification standards (QS) production is the responsibility of the Commander Land Force Doctrine and Training System (LFDTS). Any level of command may submit a request for a needs assessment.

e. **Evaluation**. The purpose of the Evaluation phase is to ensure the effectiveness and efficiency of instruction. A programme is effective if the learner has achieved the performance objective(s). A programme is efficient to the extent that methods, materials, and resource expenditures are warranted.

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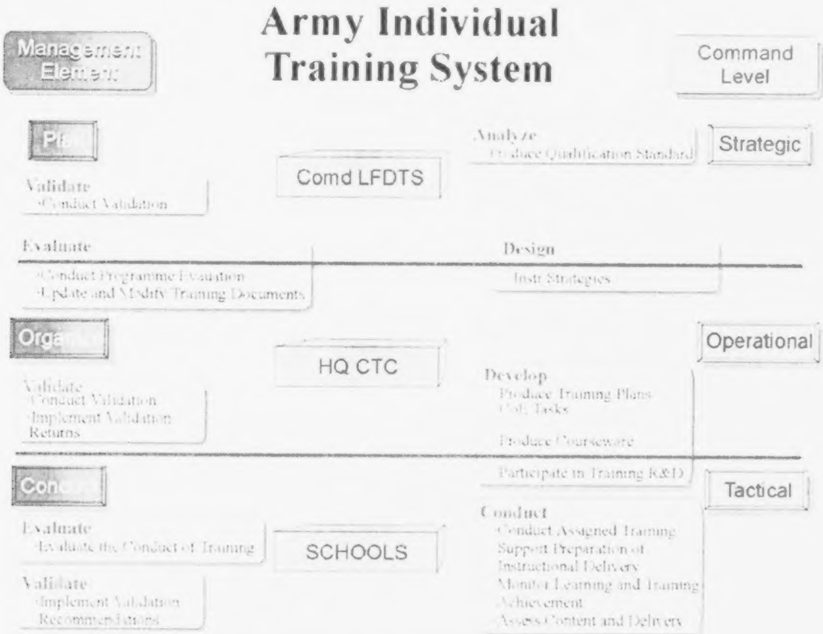
Management Element
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Produce Qualification Standard
Strategic
Comd LFDTS
Validate
-Conduct Validation
Evaluate
-Conduct Programme Evaluation
-Update and Modify Training Documents
Design
Instr Strategies
Orga
Operational
HQ CTC
Validate
-Conduct Validation
-Implement Validation Returns
Develop
Produce Training Plans
Coll Tasks
Produce Courseware
Participate in Training R&D
Con
Tactical
Conduct
-Conduct Assigned Training
Support Preparation of Instructional Delivery
Monitor Learning and Training Achievement
Assess Content and Delivery
Evaluate
-Evaluate the Conduct of Training
SCHOOLS
Validate
-Implement Validation Recommendations

**Figure 4-1: ASAT Responsibilities in the Individual Training System**

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11. Design of training plans for common Army individual training courses is conducted by Commander Combat Training Centre (CTC); however, training plans are approved by the Commander LFDTS.

12. Development of courseware will occur in the centres of excellence (CoE), but Commander CTC is responsible for co-ordinating this development and is the approving authority for training support products. Units and CoE may adjust courseware to meet local requirements (e.g., sequence of teaching performance objectives) but do not have authority to deviate from the training plan. Selection and development of instructors will be a unit/Area Training Centre (ATC)/CoE responsibility.

13. The responsibility for the conduct of training is delegated to school commandants and unit COs.

14. Evaluation (trainee assessment and internal efficiency) is the purview of the school commandants and unit COs. To aid in the discharge of this responsibility, standards personnel will be designated, and these personnel will be linked to the Command Chief Standards Officer at LFDTS.

15. Validation is an Army-wide concern and therefore is the responsibility of the Director of Army Training (DAT) on behalf of Commander LFDTS.

## SECTION 3
## PLANNING TRAINING—THE ASAT QUALITY AND QUANTITY CONTROL SYSTEMS

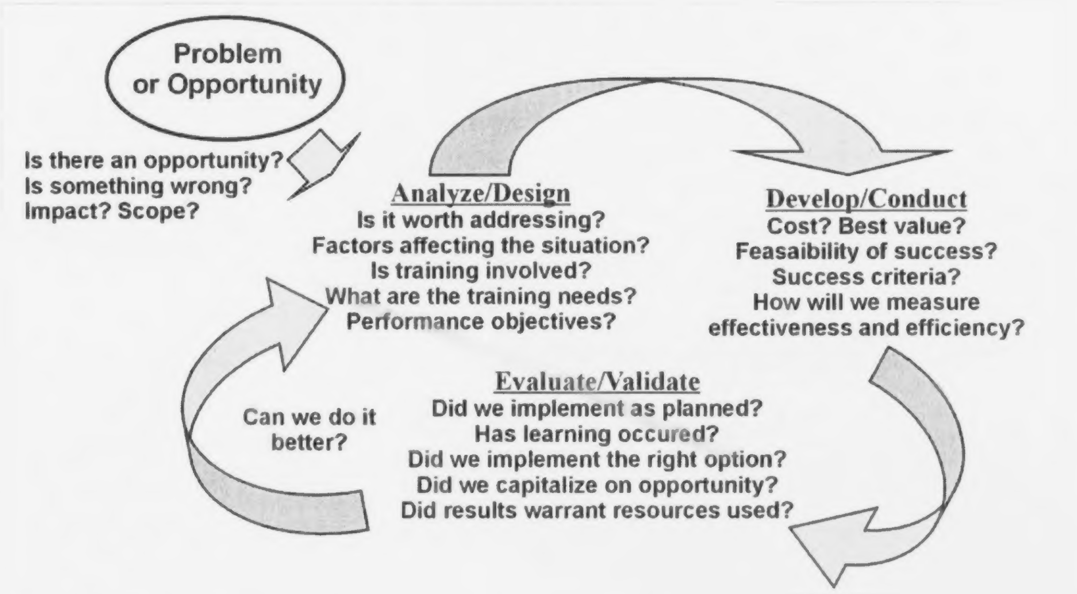

**Figure 4-2: The Quality Control Process**

16. Quality control applies to the development, implementation and maintenance of training and education programmes. Its purpose is to ensure that what a member learns meets the requirements of their tasks and duties. Quality control also seeks to husband the resources dedicated to training and education. Quality control applies to the entire life cycle of a training and education programme and is included in the six phases of ASAT. Each phase is composed of fundamental processes, which are normally completed for all training and education.

a. The ASAT Quality Control System operates to satisfy training and education needs that have been identified through strategic guidance and operational experience.

b. The six phases are interdependent and overlap to show that the system depends on concurrent activity and interaction.

c. The evaluation and validation of training and education is a continuous process; much of it is concurrent with the development and conduct of training and education. Although each type of evaluative activity has a different focus, there are commonalties that make the boundaries between them indistinct.

d. The system interacts with the larger Army and CF environment. Validation data, for example, may suggest the need for changes outside the ASAT Quality Control System, perhaps even outside ASAT. The effectiveness of the ASAT Quality Control System is reflected in the operational performance of the Army and CF.

## NEEDS ASSESSMENT

17. The application of the ASAT Quality Control System is triggered by a needs assessment, which is the process whereby a field force unit or institutional command identifies that a significant difference between current and desired performance and a means of reducing the difference is proposed. A needs assessment may also be prompted by an observed performance deficiency or by the identification of an opportunity for enhanced performance. Essentially, needs assessments identify the performance issues associated with a new or revised requirement and recommends a solution. Review may lead to approval by Commander LFDTS of new QS and the revision of training design to accommodate changes made. Annex D provides details on needs assessments.

## QUALITY CONTROL AND ARMY PROFESSIONAL DEVELOPMENT

18. Army policies regarding professional development will be established by the Army Professional Development Senior Review Board and will be issued through the chain of command. Commanders are responsible to implement these policies to ensure that the right officers and NCMs are being given the right training and education opportunities at the right time to develop them professionally and leverage that development to the collective benefit of the Army.

## QUANTITY CONTROL

19. The aim of quantity control is to ensure that the necessary training is provided at the optimum time and at an acceptable cost. Quantity control is the management tool that determines the number of individuals that must be trained and the timeframe in which the training must take place.

20. The quantity of individual training to be conducted is determined by the qualification requirements of specified Army manning positions and the unit qualification list (UQL). Each Army position has specified performance requirements, defined in the special personnel qualification requirements (SPQRs), some of which may be prerequisite qualifications. Predicted deficiency levels of qualified personnel to occupy these positions generate training requirements. Ideally, personnel receive the requisite training or education to satisfy the SPQRs prior to occupying a position. If the requisite training is not provided before occupying a position, every effort must be made to meet the SPQRs as early as possible in the tour of duty.

21. The UQL is designed to assist with identifying the types and number of SPQRs, including operational redundancies, that a unit must hold to be operationally effective. It is an efficiency control measure that prevents the over-production of qualified personnel, whose training would consume scarce resources that are better invested in other operational training imperatives. It must be remembered, however, that the UQL is merely a tool. Within units, the career development of individuals requires broad exposure to the various functions within MOCs and may demand the cross posting of individuals. Likewise, operational requirements may demand sufficient flexibility to cross employ soldiers and leaders. Consequently, the UQL must be employed pragmatically by the chain of command.

# SECTION 4
# ORGANIZING TRAINING—ASAT APPLIED

## SELECTING A TRAINING STRATEGY

22. Within the ASAT, the selection of a training strategy is critical and is conducted in the Analysis Phase of the ASAT. Learning plays a major role in the development of competent, adaptable human beings. Some human strengths, abilities and limitations are genetically determined; however, skills, knowledge and reasoning abilities as well as aspirations, attitudes and values are recognized as being learned.[5] Learning sometimes happens naturally, but for purposes of Army training and education, conditions can be deliberately manipulated to create an environment conducive to learning specified skills, knowledge or attitudes. Thus, the training strategy is the combination of all instructional strategies required to deliver the entire training programme.

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[5] Gagne, R.M. & K.L. Medsker. *The Conditions of Learning: Training Applications*. Orlando, FA: Harcourt Brace, 1996.

## LEARNING VERSUS INSTRUCTION

23. Instruction attempts to create environments and conditions that aid an individual's learning. Learning cannot be guaranteed because it is an individual phenomenon. Research into instruction has given us a good understanding of the conditions and pre-requisites that are conducive to learning. The Army's traditional model of instruction is based upon both behaviourist and cognitive information processing views of learning. Traditional instructional design focused on analysis to determine instructional strategies and methodologies needed to teach knowledge and skills based on pre-determined or quantifiable outcomes. Thus, training methodology is based on performance and enabling objectives, and instruction is focused on soldier performance of Army tasks to the established Army standard.

24. Some learning, however, is based on outcomes that are harder to define. Such learning includes problem-solving, evaluating information and integrating new ideas. A requirement exists for a learning strategy that does not impose content or methodology upon a learner, but rather supports learners in developing their own relevant learning experiences. It presupposes that the learners interpret new information based upon their own experiences. This approach is important because, as learning becomes more relevant, a trainee's ability to reason and understand increases in depth and detail. Therefore, as they learn in a context that is relevant to their everyday life and learn to construct an experiential knowledge base, individuals become more capable of doing the same in novel situations. They then acquire an ability to react appropriately in new, unpredictable situations. This is essential to the application of mission command in Canada's Army.

## HOW SOLDIERS LEARN

25. Commanders and trainers should remain cognisant of the following points regarding how soldiers learn:

a. soldiers must want to learn; therefore, instructors must find out what motivates soldiers and DO IT;

b. soldiers learn best when they feel a need to learn; therefore, linking lessons to the soldier's job is critical;

c. soldiers learn by doing; therefore, instructors must get and keep the soldiers actively involved;

d. soldiers' learning must centre on problem-solving, and the problems must be realistic;

e. past experience affects how a soldier learns; therefore, instructors must know the soldiers; and

f. soldiers learn best in a non-threatening environment; therefore, instructors must reduce unnecessary pressure and apply only the pressure required to gain the desired outcome.

## INSTRUCTIONAL METHOD

26. The word "method" refers to the type of learning activity or instructional event (lecture, case study or simulation). Methods are the first component of the instructional strategy that needs to be addressed. The aim is to select methods that have a high probability of resulting in learning and that transfer knowledge and skill to the operational environment. Annex E provides a glossary of instructional methods and guidelines for their application.

## INSTRUCTIONAL MEDIA

27. The term "media" (plural of medium) refers to the means—instructor, textbooks and/or computers—of delivering instructional activities to the learner. The instructional medium selected must support the chosen instructional strategy. The medium selected must be able to provide all of the inputs required by the learner to achieve the learning objectives. Annex F provides a description of various types of instructional media. Often there is more than one type of medium that will support the chosen instructional strategy; therefore, media selection will have to be based upon organizational and resource considerations.

## SELECTION OF AN INSTRUCTIONAL STRATEGY

28. An instructional strategy is the combination of the methods, media and environment used to deliver instruction—in other words, how the subject matter is taught.[6] One of the most familiar examples of an instructional strategy is demonstration and practice (method), led by an instructor (media) in a classroom (environment). Choosing the optimum instructional strategy is a complex matter involving many issues and decisions selected from a large number of options. An effective strategy enables learners to attain the objectives outlined in the Qualification Standard. An efficient strategy achieves this at the lowest cost per student. A business case process that focuses on instructional feasibility, resource feasibility and organizational feasibility, accompanied by an implementation plan, is the Army's method for selecting the optimum training strategy. This process ensures that the proposed strategy is instructionally sound (an essential criterion), all the associated costs and funding sources (and potential long-term savings) are identified, the organizational impact is predicted, and an implementation plan is articulated. The following criteria must be included in a business case analysis (the questions following the criteria are not all inclusive, but serve to demonstrate some of the concerns that must be addressed while examining a particular criterion):

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[6] A-P9-050-000/PT-004 *Manual of Individual Training and Education—Design of Instructional Programmes*

a. **Instructional Methodology Analysis** (instructional feasibility). Can the proposed training methodology be used to communicate the required material? Is it the optimum methodology from an instructional point of view? Are there other methodologies or combinations thereof that are equal or superior to the proposed training methodology?

b. **Cost Analysis** (resource feasibility). What is the total cost of this proposed training methodology to the Army? How does it compare to the current methodology? Are there any savings? Are there increased costs?

c. **Impact Analysis** (organizational feasibility). What are the chances that this new methodology will succeed? What are the barriers? What are the risks associated with this new methodology? What are the risks associated with *not* pursuing this new methodology?

d. **Implementation Feasibility Assessment**. What policies and procedures—e.g., Official Languages, contracting—affect this proposed methodology? Where will the resources—staffing, expertise, equipment, support, funding—come from? What is the schedule of implementation? Is there a communication plan? What about long term maintenance?

## SELECTING THE INSTRUCTOR

29. Training, especially individual training, is a human process. At the most basic level it involves a person (the instructor) causing a behavioural change in another (the trainee). Where the trainee is impressionable, every action undertaken by an instructor is significant to the trainee. While instructors will be able to witness the acquisition of skills by the trainee, they will not necessarily witness the correct formation of Army ethos in every soldier or potential leader with whom they have contact. Nonetheless, the instructors' every action, statement and impression that they leave, explicit or otherwise, contribute to the formation of the trainees' character. Soldiers who have strongly internalized the Army ethos have little difficulty adapting to mission command with its inherent ambiguity and consequent reliance on personal initiative. Unfortunately, those who have been exposed to a poor example during their instruction seldom internalize a good ethos and have difficulty adapting properly to mission command. Military instructor values have been codified to remind commanders and trainers of their significant responsibility in the selection and development of instructors.

30. Training is successful if it results in a high level of skill, self-discipline, initiative and obedience to orders at the moment of crisis. This result defines the challenge to instructors, each of whom will be looked upon as a role model by trainees in all that they do. All instructors should strive to become subject matter experts, mentors and, most of all, leaders. Commanders should ensure that the quality of instruction delivered by each instructor is of the highest possible standards. Instructor training is extremely beneficial in this regard. The individual instructor's character is also critical. The instructor must inspire, challenge, motivate, excite, enthuse and sustain in order to unlock the full potential of each trainee. The Army instructor is probably the most important link in the development of Army personnel. Therefore, it is critical that only

high-quality personnel be selected as instructors. Commanders should select instructors who possess the qualities presented below and develop these further during employment:

a. **Loyalty**:

   (1) maintains highest possible standard of integrity; and

   (2) treats fellow instructors and superiors with respect.

b. **Determination**:

   (1) provides the best training; and

   (2) develops every student to his full potential.

c. **Excellence**:

   (1) leads by example;

   (2) never overlooks a fault;

   (3) continually strives to improve professional knowledge; and

   (4) continually strives to improve instructional techniques.

d. **Cares for People**:

   (1) ensures safety in training; and

   (2) respects every trainee as an individual.

e. **Accountability**:

   (1) evaluates and treats all students fairly; and

   (2) uses resources wisely.

## SECTION 5
## THE CONDUCT OF TRAINING

### CONDUCT AND EVALUATION

31. Individual training is conducted to ensure that the required number of recruits, trained soldiers and leaders are available to maintain established manning and qualification levels. Evaluation of individual training is necessary to ensure that the required standard is achieved. Derived from occupation specifications (OS) and occupation specialty specifications (OSS), the training standards provide the aim, performance objectives, training strategy and the scope and parameters of a particular training activity. Enabling objectives are the heart of the training plan

in that they divide the content of a performance objective into achievable learning activities. Enabling objectives are then assembled into a course timetable, which outlines a step-by-step process for achieving the requirements detailed in the training standard. Evaluation is the function that ensures the effectiveness and efficiency of this process.

32. The purpose of evaluation is to compare the intended performance objectives with the results achieved. Evaluation should also lead to an appraisal of the methods and resources used to achieve the results.

## CONFIRMING AND VALIDATING TRAINING EFFECTIVENESS AND EFFICIENCY

33. Evaluation of training effectiveness and efficiency requires the involvement of the training establishment, the Centre of Excellence, the Command Chief Standards Officer (CCSO) and the chain of command. The following aspects of evaluation form the basis of course review reports (CRRs), which must be submitted at the completion of every course serial.

a. **Training Effectiveness**. Training effectiveness is a measure of how successful training is at preparing individuals to successfully perform the required tasks to the required standards. Training effectiveness is initially measured by the trainee performance statistics included in the CRR, but it can only be truly confirmed by validation data.

b. **Trainee Reaction to the Training**. The trainees' reaction to the training is a measure of what trainees think about the training, including the instructors, the timetable, the course content and the format. The trainees' reaction should be gauged by the standards cell of the training establishment with a view to eliminating obvious blocks to learning. Conducted in the form of a student critique, written questionnaires are distributed at the beginning of the course and are completed as the course progresses. At the end of training, a verbal debrief is conducted to supplement written comments. It is important to bear in mind that, while student critiques can result in useful suggestions to improving the conduct of future courses/training activities, they do not measure learning or learning transfer (did the learning contribute to job performance?). Student critiques are raw data and are not to be amended by anyone. They are to be attached as appendices to CRRs.

c. **Trainee Learning**. Learning is a measure of the knowledge acquired, skills improved and attitudes changed. To measure learning, ASAT utilizes a system of evaluations that assesses trainee achievement of the specified performance objectives and their component enabling objectives. Performance checks must be designed to measure, as realistically as possible, an individual's ability to meet the standards demanded by the performance objective. Where performance checks are usually the final measure of learning and assist in determining if the required performance standard have been met, "enabling checks" (written and practical) are tests that are administered throughout the training activity. These checks may include pre-course tests, which can be used as gateways for entry into the course itself and/or as a benchmark for assessing learning. Enabling checks are normally conducted informally and are employed by the instructional staff to reinforce learning, identify areas of required instructional emphasis, and provide trainees the opportunity to assess their preparedness to undertake performance checks. The instructional staff of the training establishment may administer performance and enabling checks; however, such checks must be prepared in close co-operation with the Centre of Excellence.

d. **On-job Performance**. On-job performance is an evaluation measure that aims to determine if the trainee has been able to transfer the knowledge, skills or attitude learned in the training environment to the real world of the job. Within the ASAT, on-job performance is an element of validation conducted after at least three months following the training event. There are many different approaches to conducting this form of evaluation. Trainees, superiors and peers can be queried both through written questionnaires and personal interviews, and the results can lead to measurement of the effectiveness of the course/training activity. The validation of individual training is the responsibility of Commander LFDTS.

e. **Training Efficiency**. Examination of trainee reaction, the learning process and the transfer of learning to the job against the anticipated results and resources expended is the final method of determining efficiency. This analysis is a strategic responsibility, and the results are used to modify the conduct of future courses/training.

## SECTION 6
## SIMULATION IN INDIVIDUAL TRAINING

34. Training simulation technology is making significant advances in fidelity, interoperability, networking, flexibility, portability, simplicity, reliability and cost effectiveness. It is becoming a fundamental component of the Army individual training system. Soldiers must be exposed to various battlefield conditions and environments during training in order to learn, maintain and confirm their skills and knowledge. Individual (level one) training simulation technology can replicate battlefield conditions for the soldiers to a high degree of fidelity at low cost. The improvement of individual training simulations will remain a top Army priority.

35. Individual training simulations must meet one or more of the following criteria:

a. teach essential basic and advanced skill sets that individual soldiers require for operationally assigned tasks;

b. maximize the benefits and resources devoted to exercises and field firing events by conducting procedural and preliminary training prior to live training;

c. maintain skill sets that might otherwise be unaffordable (command of higher formations, joint and combined operations and expensive live fire training, etc.);

d. provide objective confirmation of the effectiveness of training and enhance the after-action review process; and/or

e. achieve savings or increasing efficiency in operations and maintenance expenditures (e.g., savings in track miles through the use of a simulator).

## DETERMINATION OF SIMULATION REQUIREMENTS

36. The requirement for a simulation or simulator to support individual training requirements will be identified during the needs assessment process, whereby the difference between a current and a desired performance level is identified and the cost of training is assessed. The acquisition of a simulation or simulator will be one of the options that must be examined. If a simulation or simulator is deemed to be required, that decision must be the result of a measured assessment. For example, live firing of a missile system may be unaffordable without first employing a simulator to prepare the trainee to a threshold level. This assessment will initiate a training needs analysis. The training and requirements staffs will recommend the acquisition of a simulator, which should be delivered prior to the arrival of the new equipment to enable the trainer to master the use of the simulator, solve any integration problems and conduct a training transfer validation trial. The training transfer validation trial should be conducted to determine what training can be conducted in simulation and what training must be conducted in a live manner. This exercise will permit the training staff to objectively determine the optimum balance between live and simulation training.

37. The following activities must occur during the ASAT process to ensure the proper integration of training simulation into individual training:

a. During the **Analysis** phase, the use of simulation will be identified to support the achievement of the performance objectives that will contribute to the achievement of the training standard. For example, the decision may be taken to acquire a full crew gunnery trainer to support gunnery training.

b. During the **Design** phase, the use of simulation will be integrated into the performance objectives. For example, the decision may be made that training in live fire, except for a qualification shoot, is unaffordable; thus, all basic, intermediate and advanced firing will be conducted in simulation.

c. During the **Development** phase, the selected simulation will be mastered by the training developers in order to facilitate its effective assimilation into the selected training strategy. For example, "train the trainer" training and a training transfer validation trial will ensure that the instructors are highly competent on the employment of the simulator and that the optimum balance between live and simulation firing has been determined.

d. During the **Conduct** phase, simulation will be used to enable the individual soldiers to acquire the skills and knowledge required to achieve the designated performance objectives. For example, all gunnery training is conducted in simulation until the time and accuracy standards have been consistently achieved.

In addition, the after-action review capability of simulation can be used both formally and informally to provide immediate feedback to trainees.

e. During the **Evaluation** phase, simulation will be used to confirm that the trainee has achieved the desired performance objectives. For example, the administration of formal checks is conducted in simulation to ensure the trainee has achieved the required time and accuracy standards as a gateway to the administration of the performance check in live fire. In addition, the after action review (AAR) capability of simulation can be used to formally provide immediate feedback to the trainee.

f. During the **Validation** phase, simulation can verify, through the use of data collection, whether the training has achieved its desired goals. For example, the data compiled in the system can be subjected to analysis to provide objective feedback on the training time and resources.

38. Simulation will be employed in individual training as a support tool to assist with the effective delivery of the required skills to the trainee and to support the trainee in learning and mastering those skills. Simulation will not in itself replace live or field training, but it will ensure that the balance between live and simulation best meets the requirements of the training.

## SECTION 7
## UNIT INDIVIDUAL TRAINING

39. The Army's institutional requirements for individual training are embodied in ASAT. There is also a professional development requirement for individual training, that connects to ASAT, continuation training and personnel employment within a unit. Whereas most of ASAT is firmly in the hands of Army training authorities and in Army institutions, the professional development and continuation aspects of individual training are largely the responsibility of unit commanders. Commanding Officers have a duty to develop subordinates and to prepare them for positions of greater responsibility. They plan individual training within their units to meet individual battle task standards(IBTS) and UQL requirements. They authorize the selection of leaders and potential leaders to undergo formal and informal professional development training and education. Commanding officers also plan unit continuation training to safe guard against skill fade. Beyond this, a critical job for a unit CO is the proper positioning of individuals before and after formal individual training to ensure that these persons are receiving the benefit of experience and knowledge application.

### UNIT OSS AND IBTS TRAINING

40. Units require individuals trained to IBTS and individuals trained to perform specialist skills not covered in basic MOC OS training. IBTS requirements of a unit are determined in the Strategic Operations and Resource Direction (SORD), and the OSS requirements of a unit will vary depending upon personnel stability, taskings, promotions, casualties and changes in operational tasks assigned in the SORD. Unit commanders must plan, organize and conduct IBTS and OSS training based on operational need (with the pragmatic application of the UQL)

while utilizing the ASAT methodology. IBTS and OSS skills then need to be practised to prevent skill fade; this needs to be done under the rubric of unit continuation training.

### UNIT PERSONNEL DEVELOPMENT TRAINING

41. The Army training system must develop leaders. Commanding officers and their key subordinate commanders and NCMs are responsible for the selection of the right people to undergo formal professional development training and education. Once selected, individuals should be given the requisite job experience needed to help them prepare for formal training and education. Once trained, these same people must be provided employment opportunities to apply their trained skills and knowledge and to gain a broader education from the unique experiences offered by proper unit employment.

42. Beyond formal professional development training, unit COs and formation commanders should also institute PD programmes that enhance individual knowledge, skills and character traits. Unit PD programmes may include Army values training, community relations and media skills training, PD by assigned readings and lectures, and studies of battles and campaigns (including battlefield staff rides). Informal PD training may also include self-development such as individual participation in adventure training or fitness pursuits. The development of character is as important as technological skill, and training opportunities of this kind should be sought out and seized upon.

### UNIT INDIVIDUAL CONTINUATION TRAINING

43. After the individual has learned, practised and demonstrated ability in IBTS combat skills, those skills will be subject to skill fade. They must, if operationally required, be refreshed through continuation training. Likewise a continuation training plan is required to prevent individual skill fade of OSS skills and knowledge. ASAT methodology should also be used to plan such training.

### LAW OF ARMED CONFLICT AND RULES OF ENGAGEMENT TRAINING

44. Commanders will ensure that law of armed conflict (LOAC) training is included in appropriate individual training courses and in continuation training and informal PD training. Rules of engagement (ROE) training will occur in collective training during mimimum level of capability (MLOC) training events. However, individual knowledge and skill at application of ROE is critical at all rank levels, and commanders should frequently practise and confirm individuals under their command in the applicable ROE. Annex H gives more detail about LOAC and ROE training.

## SECTION 8
## CONCLUSION

45. Responsibility for individual training is both institutional—under authority of LFDTS—and operational—under commanders in the field force. The ASAT provides the best method to

plan, organize and conduct training and is to be used in both institutional and field force training venues. Beyond the requirements for formal individual training, commanders must also ensure that individual PD and continuation training occurs to make their units as operationally ready as possible to fulfil the tasks assigned to them by the CLS and in the SORD.

# CHAPTER 5
# COLLECTIVE TRAINING

*What we have to learn to do, we learn by doing.*

**—Aristotle**

## SECTION 1
## THE COLLECTIVE TRAINING SYSTEM

1. Collective training is the mechanism by which a commander takes a full complement of qualified soldiers and, with time, resources and applied doctrine and standards, produces cohesive combat-capable tactical groupings. The aim of collective training in the current Army context is to produce battle groups or brigades that are operationally deployable within realistic warning timeframes. Collective training comprises Training Levels 2-7 and is conducted to meet the standards presented in assigned battle task standards (BTS).

2. The Army has an institutional responsibility to focus collective training on operational needs, to identify standards to be achieved, to resource that training, and to validate training and standards. It also has a responsibility to provide feedback mechanisms to allow for training improvement and institutional learning. Land Force Doctrine and Training System (LFDTS) is the lead agency for these activities.

3. While these Army responsibilities are important, it falls upon the field force commanders (unit, brigade and Land Force Area [LFA]) to ensure that collective training is properly planned, organized and conducted to best achieve specified operational requirements. More than this, it is also a command responsibility to foster a shared and implicit understanding of the higher purpose of the training and the commander's intent for the conduct of operations. Dissemination of intent, together with uniformly applied BTS, ensures that cohesion develops in all components of the force. This cohesion is the purpose of collective training and is the most dynamic element of the Army's training systems.

## SECTION 2
## ARMY SYSTEMS APPROACH TO TRAINING

4. The Army Systems Approach to Training (ASAT) methodology applies equally to individual and collective training. Figure 5-1 illustrates rough comparisons between ASAT individual and collective training phases and products.

| ASAT Phase | Individual Training Products | Collective Training Products |
|---|---|---|
| Analysis | Identify QS to train | Identify BTS to train |
| Design | Training Plan | Training Guidance |
| Development | Training Support Material | Unit/Fmn Training Plans |
| Conduct | Courses | Training Events |
| Evaluation/Confirmation | Performance Checks | Confirmation |
| Validation | Validation Process | PXR/POR |

**Figure 5-1: The ASAT Framework**

5. Collective training must be planned. Planning begins with an analysis to determine which BTS need to be covered in training, based upon the Army's annual focus for collective training and upon operational tasks. The results of the analysis are presented in the Strategic Operations and Resource Direction (SORD) and in subsequent training guidance. Collective training must then be organized and presented in training plans that allow all parties to understand how assigned BTS and theatre and mission-specific training (TMST) will be achieved. The training must then be conducted and confirmed by the commander two levels higher in the chain of command to ensure that prescribed standards are met. Learning occurs throughout the conduct of training by means of integrated after action reviews (AARs) at all levels. Data from AARs is collated and passed to the chain of command to assist in the confirmation of collective training. The AAR process also facilitates institutional learning, with formal AARs providing data on trends. These lessons are incorporated with others into post exercise reports (PXRs), which, together with post operation reports (PORs), are the principal validation mechanisms for collective training and provide lessons learned for inclusion in subsequent training.

6. The Army's collective training system comprises all tactical organizations of the field force, as well as LFDTS and the Land Staff. Figure 5-2 illustrates the breakdown of responsibility for the application of the ASAT.

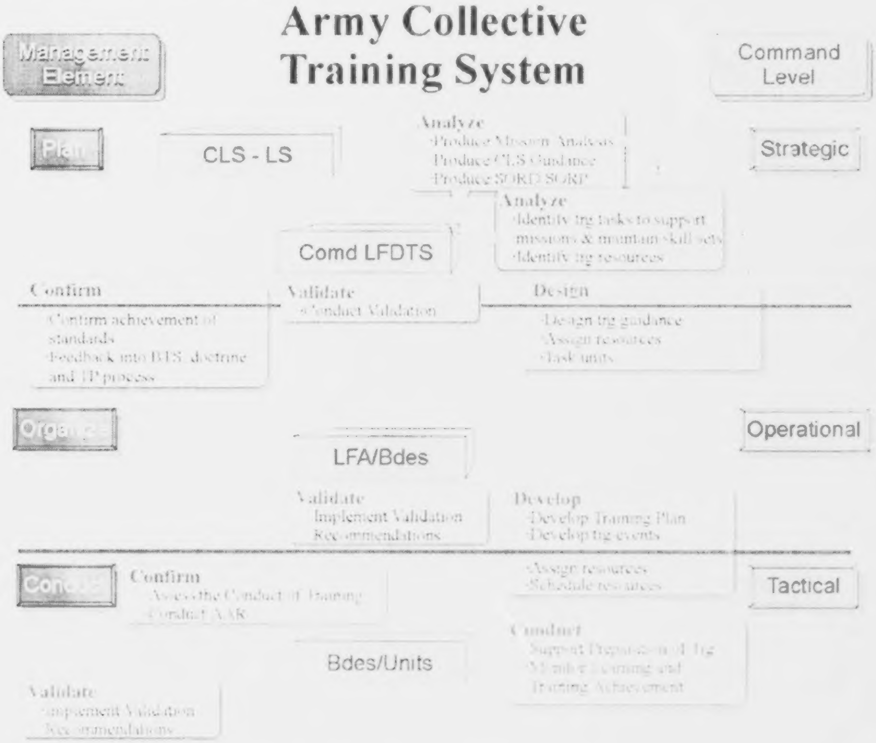

Figure 5-2: ASAT Collective Training Responsibilities

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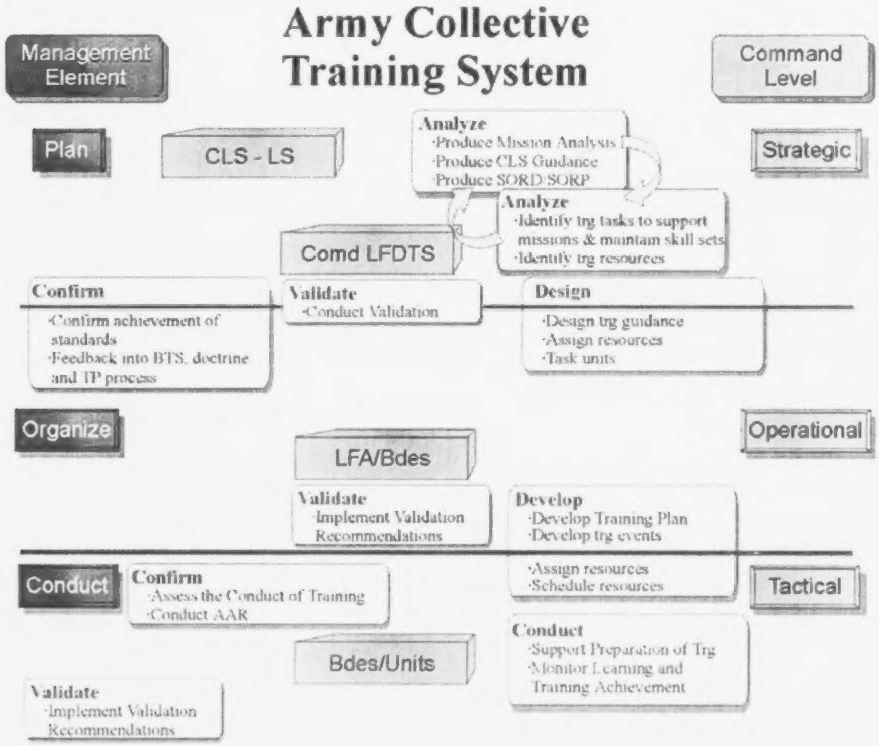

**Figure 5-2: ASAT Collective Training Responsibilities**

7. Collective training must specifically meet the requirements of the Army's operational tasks. It must also address the need for long term institutional retention of a core war fighting capability. This dual purpose is reflected in the way that the Army has divided collective training into two broad categories: general continuation BTS training, which is assigned every year to ensure continued Army excellence in war fighting, and mission-specific BTS training, which, if not covered in annual BTS training, will be part of TMST. Units in the Training Phase of the force generation cycle will conduct the general continuation BTS training. Those units earmarked to deploy on an operational task will also undergo assigned TMST relative to the mission they may assume. The breakdown of ASAT responsibility within the Army's collective training system incorporates this dual-purpose approach.

## ANALYSIS

8. The imperatives of the White Paper, Defence Plan and operational requirements are articulated in the Joint Task List (JTL). The JTL is a menu of mission based capabilities, expressed in terms of tasks, conditions and standards, which identify what is to be performed. The JTL thus acts as the means of translating training requirements into training objectives and is used as the focus for all collective training activities in joint operations.

9. It is the responsibility of the Land Staff at NDHQ, particularly the Directorate of Land Force Readiness (DLFR, representing the Joint Staff and the DCDS), to conduct mission analysis of ongoing and forecasted operational missions in order to determine pre-deployment training requirements—including the TMST required to ensure mission success. DLFR, in conjunction with the Directorate of Army Training (DAT), will identify exact TMST for international operations and the associated resources required to achieve these TMST. Units earmarked for operational missions will be assigned this TMST in pre-deployment training directives. DLFR, in conjunction with LFA commanders, will identify exact domestic operations training requirements, including resource requirements.

10. It is the responsibility of the Commander LFDTS to provide an annual general continuation BTS training focus for the Army. This focus will be based on an ongoing analysis by DAT of the state of Army collective training, specifically Army competency with regard to war fighting BTS. The continuation BTS training focus will be passed as training guidance to all LFAs through the SORD. It will be designated as the Main Contingency Force (MCF) SABRE Brigade training focus but will also be used by all units and formations (both Regular and Reserve Force) as the general Army focus—regardless of other operational tasks, states of readiness or level of capability. Resource allocation will match this general guidance and be refined in the SORD/ Strategic Operations and Resource Planning (SORP) process. The SORD will also be used to designate units for significant non-BTS collective training events, such as small unit and reciprocal military exchanges.

11. It is the responsibility of LFA and brigade commanders to analyze the continuation training BTS to identify to which level of training the assigned BTS should be achieved by each subordinate unit given the resource envelop allocated. This may devolve to unit commanders if deemed necessary. The responsibilities of LFA and brigade commanders to analyze and refine

TMST are also important, particularly for domestic operations training. LFA Commanders should analyze and submit proposals for domestic mission-specific training as deemed necessary.[7]

## DESIGN

12. LFA and brigade commanders hold most of the responsibility for designing collective training including TMST. They must issue training guidance to all units embarking upon the Training Phase of the force generation cycle, confirm assigned BTS and resources for those units earmarked for TMST, and assign training support tasks to those units in the Support / Reconstitution Phase of force generation.

## DEVELOPMENT

13. Brigades and units develop detailed training plans that implement the training guidance received. The plans must identify the exact BTS to be achieved to meet the general continuation training BTS focus assigned in the SORD. The plans must also detail how TMST training, including domestic operations training, will be scheduled and conducted for designated units, the resources needed for all training, training support requirements and tasks, and how training confirmation will occur. Training plans must be reviewed by the confirming commander to ensure that there is no confusion regarding which BTS are to be trained and confirmed.

## CONDUCT

14. Much preparation must occur before effective training is to be conducted. LFA commanders, who are the Army's primary force generators and domestic operations commanders, and brigade commanders play an important part in this preparation. They must guarantee units in the Training Phase receive all support and resources required, while affording protection from taskings, thus ensuring effective and efficient training. Unit and sub-unit commanders must monitor learning and training achievement and use the training opportunity to create collective competency and cohesion. Their motivation toward training and their personal conduct in training are decisive factors in determining training value. The exercise director, safety and observer/controller (OC) staffs are also critical. They ensure training safety is instructed and effected, and they facilitate immediate learning by use of the AAR process.

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[7] For further clarification of the role of training in preparation for international operations, refer to *DCDS Direction for International Operations* dated 1 March 2000

## CONFIRMATION

15. It is traditional in Canada's Army that superior commanders observe critical training events of subordinate commanders two levels down in the chain of command. This tradition forms the basis of the confirmation process. Confirmation is an assessment of how well a tactical organization has mastered a particular BTS, or set of BTS, and whether or not subsequent training is required. The LFA commander confirms major battle group training events; the brigade commander confirms major combat team training events. Unit commanding officers determine to what extent confirmation will occur within unit BTS training. Commander LFDTS, on behalf of the CLS, confirms brigade training events. All these commanders are aided by the OC staff and the collated data they provide regarding work up training and lower level performances during the confirmation training event. Confirmation of TMST will lead to a declaration of operational readiness for deployment. Details concerning confirmation methodology are included in Annex B.

## VALIDATION

16. Commander LFDTS holds the primary responsibility for ensuring that validation of training occurs. His chief concerns are that the training conducted and the standards achieved provided the necessary level of competency for a given BTS skill-set. Validation is facilitated by drawing upon AAR data, observer reports from Directorate of Army Doctrine (DAD), DAT and Directorate of Land Requirements (DLR) representatives present during training and collated into PXRs, and subsequent PORs and personal reports from operational commanders. Commander LFDTS is responsible for making the necessary changes to qualification standards (QS), BTS, tactics, techniques and procedures (TTP), and doctrine and for recommending equipment specification changes as required. The Commander LFDTS uses validation feedback mechanisms to drive Army learning. He must be supported by field force and Army institutional commanders for the implementation of lessons learned.

## SECTION 3

## PLANNING COLLECTIVE TRAINING

17. The SORD will drive Army collective training. It will prescribe specific training for units designated to undergo training for particular high readiness tasks. It will prescribe the training focus toward which all Army units—both Regular and Reserve Force, even those designated to undergo specific BTS for operational tasks—will orient their training.

18. Commanders will receive direction regarding training in the SORD. The SORD will breakdown Defence Plan commitments and allocate troops to tasks. It will identify BTS training requirements for units assigned tasks. All other units will train to the BTS assigned to the MCF. Figures 5-3 and 5-4 illustrate the manner by which training guidance will come in these annexes. In the example, LFCA has been designated to fulfil the SHIRBRIG[8] (OP VIKING) BG and the

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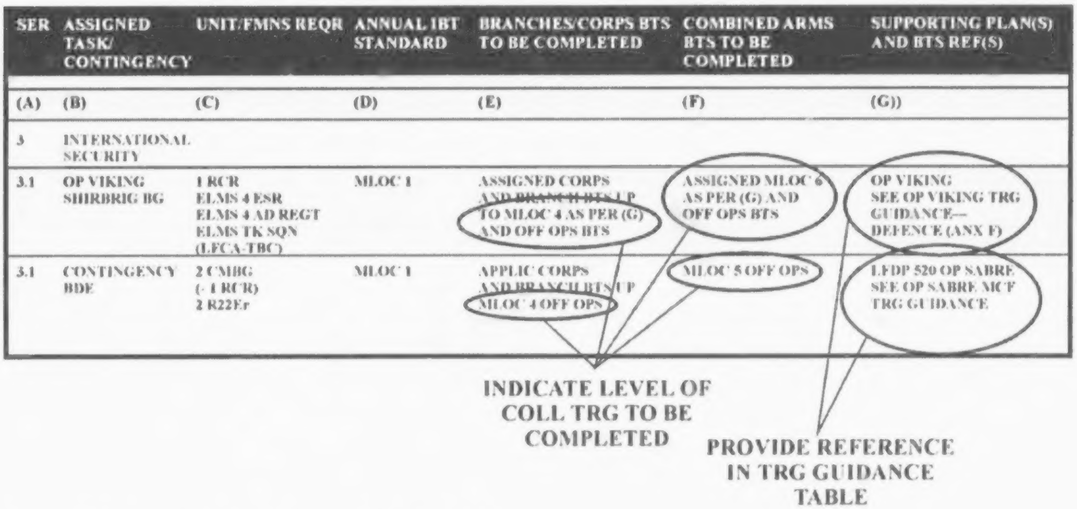
[8] United Nations Standby Forces High Readiness Brigade.

SABRE commitments. Commander LFDTS has designated an annual BTS training focus on offensive operations. For Serial 3.1, 1 RCR is tasked to undergo training for OP VIKING. They will receive training resources to complete specific BTS assigned. On the next line, 2 CMBG is designated as the lead contingency (SABRE) brigade organization and will receive 2 R22eR operational control (OPCON) for training. These units will train for offensive operations up to minimum level of capability (MLOC) level 6 (battle group competency), and will be resourced to achieve the necessary standards. The exact sub-unit BTS will not be provided but will be identified through analysis conducted by LFCA and 2 CMBG and must be achievable within the resource envelop allocated to 2 CMBG in the SORD. 1 RCR will not be part of this SABRE organization but will also be responsible to train in accordance with the offensive BTS focus prescribed in the SORD as well as the specified BTS.

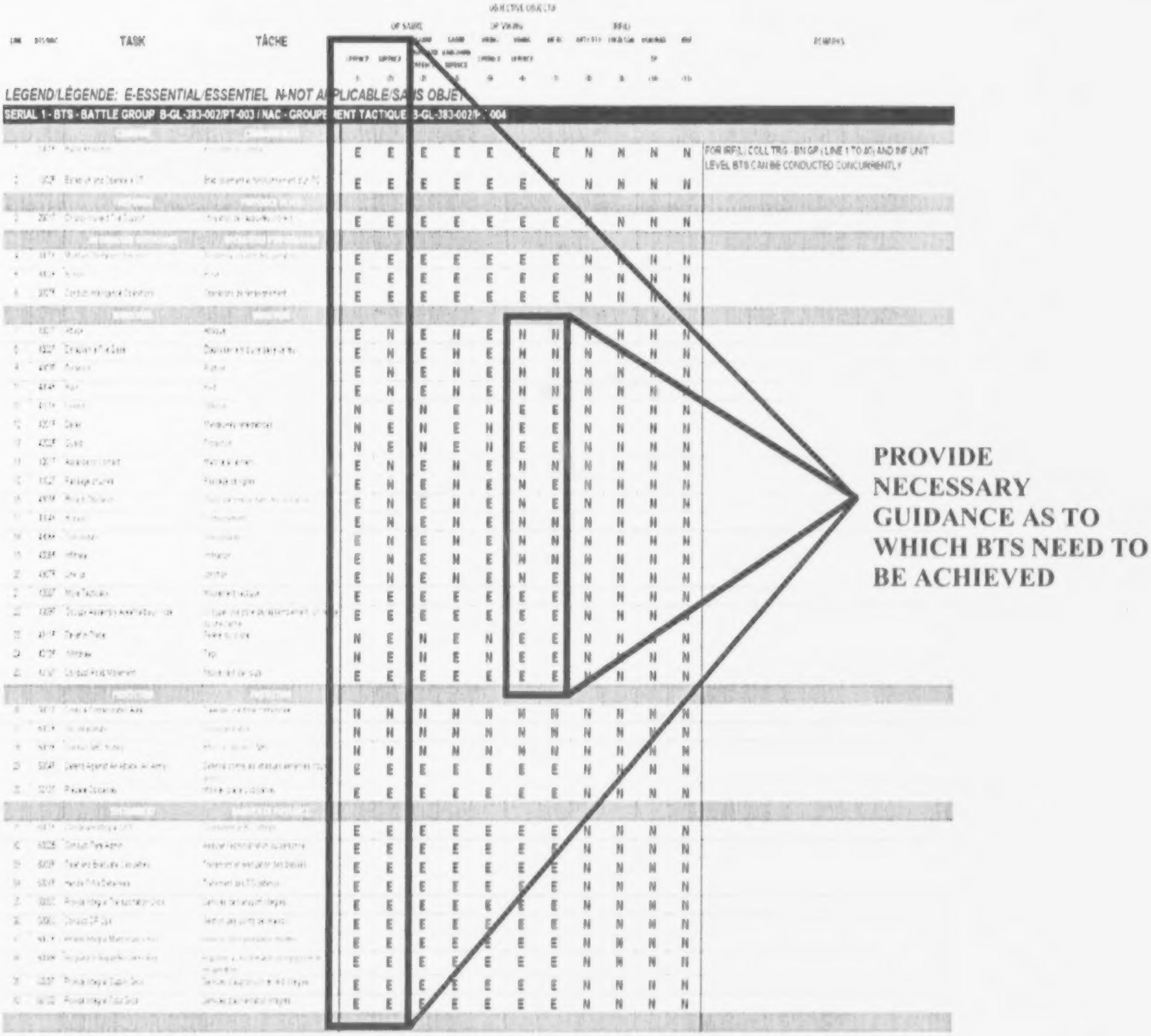


| SER | ASSIGNED TASK/ CONTINGENCY | UNIT/FMNS REQR | ANNUAL IBT STANDARD | BRANCHES/CORPS BTS TO BE COMPLETED | COMBINED ARMS BTS TO BE COMPLETED | SUPPORTING PLAN(S) AND BTS REF(S) |
|---|---|---|---|---|---|---|
| (A) | (B) | (C) | (D) | (E) | (F) | (G)) |
| 3 | INTERNATIONAL SECURITY | | | | | |
| 3.1 | OP VIKING SHIRBRIG BG | 1 RCR<br>ELMS 4 ESR<br>ELMS 4 AD REGT<br>ELMS TK SQN<br>(LFCA-TBC) | MLOC 1 | ASSIGNED CORPS AND BRANCH BTS UP TO MLOC 4 AS PER (G) AND OFF OPS BTS | ASSIGNED MLOC 6 AS PER (G) AND OFF OPS BTS | OP VIKING<br>SEE OP VIKING TRG GUIDANCE—DEFENCE (ANX F) |
| 3.1 | CONTINGENCY BDE | 2 CMBG<br>(- 1 RCR)<br>2 R22Er | MLOC 1 | APPLIC CORPS AND BRANCH BTS UP MLOC 4 OFF OPS | MLOC 5 OFF OPS | LFDP 520 OP SABRE<br>SEE OP SABRE MCF TRG GUIDANCE |

INDICATE LEVEL OF COLL TRG TO BE COMPLETED
PROVIDE REFERENCE IN TRG GUIDANCE TABLE

Figure 5-3: Training Tasks Allocated in the SORD

19. The assignment of a continuation BTS training focus does not mean that every single BTS for that type of operation must be covered. Nor does it exclude BTS from other types of operations. A focus on offensive operations should include training in combat team hasty defence and may or may not include deliberate obstacle breaching, depending on time and resources allocated and specific guidance provided from Commander LFDTS. Conversely, a defensive operations training focus should include mobile defensive tasks and counter moves. The Army can not afford to prescribe too narrow a focus for training at the sub-unit and unit level but must ensure that over time all doctrinal tasks reflected in BTS are pratised and therefore reviewed to ensure doctrinal relevancy. This review is essential to institutional learning.



TASK
TÂCHE
PROVIDE NECESSARY GUIDANCE AS TO WHICH BTS NEED TO BE ACHIEVED

LEGEND/LÉGENDE: E-ESSENTIAL/ESSENTIEL N-NOT APPLICABLE/SANS OBJET

SERIAL 1 - BTS - BATTLE GROUP B-GL-383-002/PT-003 / NAC - GROUPEMENT TACTIQUE B-GL-383-002/PT-004

FOR IRF(L), COLL TRG - BN GP ( LINE 1 TO 40) AND INF UNIT LEVEL BTS CAN BE CONDUCTED CONCURRENTLY

Figure 5-4: Designation of Continuation and Mission-specific BTS in the SORD

## TRAINING DESIGN

20. The BTS analysis conducted at LFA and brigade headquarters are used as the basis for subsequent training guidance and training plans. Scheduling training and matching resources to tasks are not easy to do but are helped by the utilization of the three phases of the Army's force generation cycle. Those units that undergo BTS training and TMST in the Training Phase become the main effort for LFA and brigade resources. Units that are in the Operations Phase and not deploying will support units in the Training Phase—provided that their high readiness states are not compromised. Likewise, units in the Support / Reconstitution Phase may train to a

limited extent to achieve some low-level focussed BTS but must primarily be used to support units in the Training Phase and to conduct the myriad of tasks that fall upon the field force to fill. Training guidance must ensure that assigned training tasks are achievable with the resources allocated and are accounted for within the appropriate business plans.

21. The SORD will drive the first stages of ASAT applied in collective training. However, there will continue to be a need for day-to-day management and co-ordination of training between the LFAs and the Land Staff. The DAT detachment located with the Land Staff in NDHQ will effect this management.

## RESOURCING COLLECTIVE TRAINING

22. Each battle task in the Army's inventory has been analyzed and assigned a resource template. This template is attached as an Annex to the electronic copies of the BTS held by the Land Staff and is used to ensure that the resources needed to accomplish tasks are identified and provided. These templates help DLFR and DAT determine the resources required to conduct BTS training.

23. The templates are evolving and require validation. The future use of automated data technologies in programming training will greatly assist in matching resources to tasks in accordance with the principle that resources follow tasks.

24. The resource planning templates attached to each BTS are intended to provide guidance on the time and resources required to successfully complete collective training (including confirmation) at each training level. The Army will eventually have access to these templates via automated systems, which will make it easier to determine exact BTS when designing training guidance and developing training plans. The resource guidelines are based on the following assumptions:

a. the unit being exercised has the majority of its leaders qualified and in-place and the equipment required for the training is available;

b. the unit successfully completed its previous level of training prior to commencing the current level of training.

25. The resource templates in the battle tasks are not exhaustive, but they cover the key components concerning major costs of collective training. These templates represent the generally accepted resource levels for each task; where circumstances are extraordinary, there may be a requirement to allocate additional time and resources to a unit. This requirement will be determined by the superior commander of that unit either in the SORP process or as part of a pre-deployment training resource request.

26. Resource templates differ according to corps or combined arms requirements. However, at a minimum they detail the following:

a. Any specific assumptions, conditions and limitations on the training.

b. The time required for each activity (e.g. leader training, field exercises).

c. The frequency of training to maintain operational readiness.

d. The resources required to support a given level of training. The resources are expressed in terms of units of measure per soldier or vehicle (e.g., 210 rounds 5.56 mm blank per soldier or 200 km per tracked vehicle). Total costs can be calculated by adding up the number of participants and vehicles for any given exercise or activity.

## DEVELOPMENT OF COLLECTIVE TRAINING

27. Commanders will develop training using training plans and exercise instructions. Future automated data will facilitate this development by providing quantifiable data on resource templates, training time requirements for each BTS, training areas and weapons templating information. While this information is essential in the initial planning phase, it is data-focused. Detailed and realistic training plans still require input of an imaginative commander.

28. Understanding the time/space/resource factors involved, and knowing which BTS are to be achieved, commanders must creatively design training activities that best achieve the results desired. Visualization of training activities is critical. Once a commander/trainer has a vision of what can be done with the allocated resources and how a unit should look during confirmation training, the commander can begin to specify what training activities need to take place and how those activities should be sequenced. A commander should articulate his vision of those activities and sequence in a statement of commander's intent, and that vision must be reflected throughout the formal training plan or exercise instruction. Once a training plan is complete, it should be briefed back up the chain of command to the confirmation commander in order to ensure that the training commander's vision and intent are nested within the higher commander's intent. In this manner there emerges a consistency of training and operations focus between all levels of command—this consistent focus is critical to the establishment of cohesion.

29. The following factors, if addressed when developing training, will greatly increase the chances of a successful outcome:

a. **Leadership**. The importance of developing strong leadership during collective training cannot be overstated. High quality leadership is refined through practice, and every opportunity must be taken to permit leaders at all levels to exercise their skill and authority. Leaders must be trained and practised in their craft by their own superior commanders. The individual training system merely provides individuals with the raw skills, knowledge and attitudes in preparation for collective training. It is during collective training that command skill is acquired.

b. **Stability**. A unit that has undergone personnel changes is less effective than one that has trained as a unit, established routines, and knows its internal strengths and weaknesses. Training should focus on developing strong team spirit and identity. Senior commanders must retain group integrity during collective training so that teams can form, practise and evolve into highly effective combat units.

c. **Experience**. A unit that regularly trains and has the depth of experience gained from realistic training or operations will be much more effective than a unit that trains less often or less vigorously. The scope and tempo of collective training should not be so restrictive that previous lessons learned are neglected and forgotten.

d. **Depth**. A true measure of effectiveness is the ability of a trained unit to perform without its principal commander. Training must incorporate opportunities for subordinate leaders to replace their immediate commanders. This practice immeasurably increases trust, as it exposes subordinates to the demands of command, improving their cognitive knowledge and leadership skills, and better prepare them for positions of increased responsibility.

e. **Team Building**. In addition to validating team battle performance, collective training performs the vital function of team building. Operational research has proven that cohesion is the most important factor influencing the soldier's will to fight. Strong teams foster the determination required to translate good training into mission success.

f. **Mission Command**. The Army's command philosophy requires that commanders at all levels foster the low-level use of initiative in the resolution of tactical problems. In order to employ mission command throughout a unit, each component of that unit must be trained to a confirmed standard, must understand unit standard operating procedures (SOPs), must trust each other and must understand implicitly how their commander and commanding officer wants tactical situations handled. By creating an environment wherein these things are developed to a high degree, great scope arises for the use of initiative by low-level commanders. A command climate that encourages this use of initiative will find that the execution of BTS will be much more rapid, effective, with less requirement for detailed orders, and the unit as a whole will be able to sustain a high tempo of operations. This is the desired end state of mission command and what is aimed for in collective training.

## SECTION 4
## THE CONDUCT OF COLLECTIVE TRAINING

### STAGES OF TRAINING

30. In conducting training, there must be a logical progression from lower to higher levels of training to ensure competency in each BTS. Progression from one level of training to the next will not normally occur until competency in the lower level has been formally confirmed. A successful confirmation, which results in a move to the next level, is referred to as a "gateway" and represents the prerequisite to progression. Within each level there are three stages of training:

a. Preliminary;

b. Practice; and

c. Confirmation.

## PRELIMINARY

31. Preliminary training introduces the team to the task and affirms the common baseline knowledge of doctrine while establishing SOPs. The activities generally take the form of theory reviews using simple terrain models, chalk diagrams or walk-throughs on representative terrain. It is at this stage that the leader delineates performance expectations for the training that will follow and establishes the foundation of shared and implicit understanding of the commander's intent. Consistency is critical to a successful outcome. The leader must demonstrate mastery of the TTPs applicable to the battle task and must be clear about SOPs. Further, as training progresses, the leader's expectations must remain constant.

32. The aim of preliminary training is to ensure the existence of a common doctrinal base among leaders and subordinates. In the collective training context, the following five methods are most commonly used:

a. **Professional Development/Theory of War**. Professional development training may include the study of battles and campaigns and discussions of tactics, techniques and procedures. It might include a study of writings on war or it may include a visit to a particular battlefield.

b. **Model Exercise**. Model exercises use representative terrain models and tactical symbols to demonstrate the application of doctrine to hypothetical situations. They can be conducted as a structured training activity or as impromptu activities to illustrate a point. Model exercises are frequently used as aids to mission rehearsal.

c. **Tactical Exercises Without Troops**. Tactical exercises without troops (TEWTs) are an essential tool to effect the transition from theory to practice, to talk through new approaches, to explain a commander's intent and to effect team building. They involve the key leaders of the organization but not the soldiers. TEWTs are primarily of use to establish command SOPs and to illustrate commander's intent.

d. **Computer Assisted Exercises**. The capability to conduct computer assisted exercises (CAXs), represented by the use of constructive simulation (JANUS and Command and Staff Trainer [CST]), is a significant advance in the methods used to develop tactical skills amongst leaders. JANUS is the primary simulation for use up to battle group level, while the CST is best employed at formation level. Plans can be discussed and developed, options can be played, two-sided play against peers or an Opposition Force (OPFOR) can be exercised and a detailed after action review is available for each training iteration. As an extension to the model exercise and the TEWT, CAXs are highly effective command and staff training aids.

e. **Command Post Exercises**. The primary tools for conducting command post exercises (CPXs) will be constructive simulations. These high-resolution simulations exercise all of the combat functions to a very high level of fidelity and realism and provide a detailed after action review capability. CPXs are normally not conducted below the battle group level, but leaders from every level of an exercised unit can be employed. CPXs may be linked to field training exercises (FTXs) at the brigade level, with a portion of the brigade in the field and a portion replicated by constructive simulation.

## PRACTICE

33. The practice stage of collective training brings teams to the required competency level (i.e., they meet the battle task standards). This achievement is accomplished predominantly through a series of stands training events wherein frequent informal AARs allow leaders to shape the collective mindset of their soldiers. Observer/controllers should be employed if resources allow. If not, commanders one level up may also conduct AARs using the self-discovery methodology. When there is considered to be competency in a series of battle tasks, these may be practised in a tactical context in preparation for the task confirmation. This process is repeated for each battle task assigned at a given level of training. Current experience indicates that three iterations of any given task are required to gain an acceptable level of competency or to arrest skill fade. Training fewer tasks, but with more practice iterations, is essential; this provides an adequate base for naturalistic combat-decision making, based upon cognitive pattern-recognition. Conversely, too many practice iterations of the same task (using the same conditions) has diminishing value.

### *Observer/Controllers*

34. An OC is an experienced soldier who accompanies the tactical organization in training, observes what is going on and assists them in identifying what is going right or wrong and what to do about it. Use of OCs has not been wide spread in the Army since the 1970s but must become so if the Army is to make maximum leverage of training events. OCs may assume the traditional role of umpire on force-on-force exercises (even with the implementation of weapons effect simulations, they remain important in this function). OCs will reinforce designated safety staff in ensuring that training is conducted safely. However, their main function is to facilitate learning and to capture lessons learned. Their primary instrument to promote learning is the AAR process. Observer/controllers use this process to induce immediate learning in the tactical organization referring always to how much the observed performance measured up against the written BTS and sanctioned doctrine (SOPs and TTPs). Observer/controllers also collect data on unit performance and doctrinal ideas and trends. They use both formal and informal methods but always capture observations in writing. Observations are collated by the central exercise directing staff and unit operations and training staff for use by the chain of command in confirmation. Likewise, the data collected from observer/controllers may be collated and analyzed to produce Army lessons learned. The role of the observer/controllers spans the conduct, confirmation and validation functions of ASAT, and their incorporation into training is essential if the Army is to extract every possible benefit from training events.

35. The use of observer/controllers at lower levels may be facilitated by employing immediately superior commanders (e.g., platoon/troop commanders /2ICs to observe sections/crews) or by using personnel from other units that may have recent significant training or operational experience. At higher levels of training, observer/controllers must be an independent and trained body of experienced personnel working for the exercise director. They will use both informal and formal AARs, and their provision of accurate data on the training observed is critical to the confirmation and lessons learned functions.

### *Battle Stands Training*

36. Battle tasks and sub tasks can be assembled into a battle stand for low level training and rehearsals. For example, the deliberate attack on a defended position is a complex operation comprising the break in, the fight through and the defence against counter-attack. A company commander may focus training on any one of these sub-tasks in a specific battle stand.

37. Battle stands are training events conducted with limited and specific training objectives. They are organized by trainers to run tactical groups of soldiers through a battle task. They include a preliminary briefing to the group, a practice under the group commander, and a test drill or run-through. The training itself might occur in a realistic environment (e.g., a trench system) but does not include tactical factors such as simulated artillery or tactical resupply. The Opposition Force is controlled by the stand's OCs, and the tactical context is developed in a preliminary briefing. The stand usually lasts long enough to provide adequate practice of a particular collective skill (TTP) but not long enough to allow the situation to deviate from the primary training objective. Battle stands may be repeated as many times as required, they may be interrupted, and AARs may be conducted at any point. Qualified OCs should be employed.

38. The tempo of a battle stand can be adjusted. For new soldiers, early iterations can take the form of walk-throughs, allowing ample time for questions and AARs. In contrast, battle stands conducted as mission rehearsals for seasoned units may exceed the expected operational tempo, and AARs may be brief. The expected outcome, however, is the same: a sub-task performance that, when combined with other sub-task components, meets the BTS. Battle stands are of greatest value in TTP training.

### *Field Training Exercises*

39. A field training exercise (FTX) is a series of battle stands executed in a realistic tactical context with the aim of practising complete BTS. An FTX employs relatively free play or remotely directed Opposition Forces and includes as many combat, combat support and combat service support (CSS) functions as can be exercised at that level of training without jeopardizing realism. Ideally CSS should be subject to all of the normal or imposed conditions of combat. Operational scales of issue, entitlements and supply rates should be followed, necessitating that tactics be governed as much by logistics as by combat factors. Exercises have AARs; however, they do not normally interrupt the tactical scenario, and operations are not generally repeated. The introduction of weapons effects simulations (WES) into the Army will greatly enhance the Army's ability to conduct realistic FTXs.

40. To facilitate focused higher level combined arms training, units may be concentrated in one location for an extended period of time. This gathering of forces for collective training will include preliminary training activities, battle stands training and FTXs. The activities may begin with Level 1 skill confirmation and may culminate in a Level 6 or 7 FTX. If effective learning is to occur, clear differentiation between battle stands and FTXs at each level is required, so that soldiers and junior leaders know what is expected of them in each case. Battle stands that are treated as FTXs and vice-versa serve only to confuse and frustrate everyone involved and ultimately impair training effectiveness. In this regard, division of Army training into preliminary training, battle stands and FTXs eliminates the need for such improvizations as "half-tactical" field exercises.

### *Training Concentrations*

41. Specialist skills and weaponry often necessitate concentrations of like sub-sub units or sub-units in one location at one time to conduct common preliminary training, battle stands training and live fire together. This concentration is done to produce economies in training and to standardize TTPs and SOPs. Training concentrations might be used to train brigade indirect fire assets, TOW platoons, engineers and pioneers, snipers, etc.

### *Live Field Firing*

42. Live field firing is most often conducted as a battle stand. It can take the form of either live direct shoots on prepared or improvised ranges or indirect shoots into impact areas. Directives concerning gunnery training on lane ranges and impact areas are contained in the applicable corps/branch manuals and policy edicts. All live field firing, however, will be conducted within the safety parameters detailed in B-GL-381-001/TS-000 *Operational Training: Training Safety / Entraînement opérationnel : Sécurité à l'entraînment.* Tactical field firing, live fire indoctrination and battle inoculation should be conducted prior to deployment for operations for the following reasons:

a. to inoculate soldiers and leaders against the noise and sensations of live engagements;

b. to familiarize soldiers with the handling of live ammunition under battle conditions;

c. to demonstrate the real effects of live munitions;

d. to provide all personnel with an awareness of weapons' ranges;

e. to build confidence in the organization's ability to fight;

f. to build confidence in the firepower and capability of the combined arms team; and

g. to allow commanders and observers to practise the synchronization of fire and manoeuvre.

43. While live field firing is a critical component of training for operations, the safety restrictions it places on manoeuvre and the application of fire somewhat limits its value as a tactical training method. Training with a WES system possessing a data collection and debrief capability involves far less risk while producing vastly superior tactical results. WES training will often form the culmination of a training event after live fire has been conducted and is the best means of confirming training. WES and live training, however, are both critical and complementary components of a given training plan.

## CONFIRMATION

44. Confirmation of collective training has one fundamental purpose: to improve performance to ensure that units assigned operational tasks may have a confident expectation of success in operations. Confirmation is a tool to permit the verbal reinforcement of success or to focus effort to correct group shortcomings. Objective confirmation will support the chain of command in the preparation of units for operations. It gives the commander being trained detailed feedback even while the training is proceeding. This feedback will permit him to correct problems and increase the probability of success. With a confirmation regime in place, the value of each collective training event is fully realized.

45. Confirmation is a process that assesses performance against a given standard. It can be formal or informal depending on its nature and extent, but it is always conducted in support of the chain of command. Instructions on confirmation methodology and the support required for confirmation are detailed in Annex B. In the context of collective training design, the confirmation plan defines the gateways, methodologies and simulation requirements in the training plan and triggers the provision of support assets.

46. Achievement of the standard must be formally confirmed by the commander two levels higher in the chain of command, who will assess performance in relation to the written battle task standards. Successful performance of the task(s) results is the gateway for that training level being passed. A good command climate is critical to success at this juncture.

47. Confirmation of collective training is not new. In World War I, the Canadian Corps achieved success in battles such as Vimy Ridge because of careful training, rehearsal, and confirmation of the competency of every battalion and regiment at the Corp's "battle schools" prior to the assault. Similarly, in World War II, the Canadian Army embraced the "battle drill" and established schools in both England and Canada to teach and confirm the effectiveness of formed units in these drills.

## SECTION 5
## UNIT COLLECTIVE TRAINING

### CONTINUATION TRAINING

48. As with individual training, it is a commander's responsibility to reduce the risk of skill fade by implementing collective continuation training as needed to meet the operational readiness requirements specified in the SORD. Collective continuation training should be

planned, organized and conducted using the same training methodology, whether it occurs in ELOC (essential level of capability) or MLOC.

## RUE/SUE TRAINING

49. The Army receives opportunity each year to improve interoperability with our major allies in the form of Reciprocal Unit and Small Unit Exchanges (RUE and SUE). The allocation of these opportunities will be directed in the SORD and will be aligned with a unit's operational tasks. Unit commanders are to take maximum advantage of the unique training benefits offered in all RUE/SUE training events, regardless of their size or scope.

## ADVENTURE TRAINING

50. Collective training also includes adventure training programmes for sub-units, sub-sub units or smaller groupings. Adventure training is a superb tool to foster self-confidence, strong leadership and team cohesion in challenging circumstances. Opportunities and resources for adventure training may be allocated to a unit from a higher headquarters, or they may be requested by a commanding officer. All opportunities to conduct such training should be taken where possible.

## COLLECTIVE TRAINING AND PROFESSIONAL DEVELOPMENT

51. Professional development is reliant upon collective training. While individual training and formal education are important to the acquisition of knowledge and skill in each Developmental Period, it is only by collective training that this knowledge and skill can be applied and validated. The experience gained by individuals in collective training events reinforces past training and education thereby building the individual's experience and allowing them to acquire more innate problem-solving abilities. It also exposes that person to higher methods and concepts giving them the broad base of experience and exposure needed to progress to the next Development Period. Commanders should attempt to integrate the requirements of individual professional development into the collective training framework to foster a continuous learning environment.

## LOAC AND ROE TRAINING

52. Commanders ensure that collective training events reflect the personnel knowledge and adherence to the Law of Armed Conflict (LOAC) and applicable rules of engagement (ROE). Training for LOAC and ROE must be included in the training design, practised and confirmed at all levels of command. Annex H contains details on LOAC and ROE.

## SECTION 6
## RANGE AND TRAINING AREA REQUIREMENTS

53. The range and training area requirements for training at various levels are defined in the Land Force Range and Training Area Policy. As a rule, field exercises will be conducted at a training area that has sufficient space to accommodate the exercising unit. Unit training must not be compromised by excessive congestion caused by over allocation of manoeuvre areas. This may, however, require careful planning. Training area requirements and planning data can be found at Annex G.

## SECTION 7
## USE OF SIMULATION TO SUPPORT COLLECTIVE TRAINING

54. Recent technological advances in simulation have greatly enhanced its capability as a training multiplier. Simulation technology can replicate the battlefield environment to a high level of fidelity.

55. Canada has agreed to the NATO defined grouping of military simulations into three broad categories or levels as follows:

a. Level 1—Individual and Crew Training;

b. Level 2—Collective Training; and

c. Level 3—Command and Staff Training and War Gaming.

56. The broad applications of simulation in support of collective training are as follows:

a. retaining the essential individual, crew and unit skill-sets to meet the standards for operationally assigned roles and missions;

b. maximizing the value of resources devoted to training, particularly to field training exercises, by preparing participants for the field events through procedural training and the achievement of skill "gateways" prior to live training;

c. maintaining skill-sets that might otherwise be unaffordable;

d. confirmation and validation of training; and

e. achieving savings in O&M (operations and maintenance) costs by replacing resource-intensive activities with simulation.

57. The training of soldiers and commanders is greatly enhanced by allowing them to realistically experience the friction, stress and uncertainty of virtual combat. At the same time, performance can be monitored, recorded and used to conduct AARs. This capability permits measured improvement in performance. Furthermore, effective use of this technology is permitting battlefield lessons, which in the past could only be learned painfully and expensively during the initial days of operations, to be learned during peacetime training.

58. Canada's Army has acquired impressive command and staff simulation trainers. These are to be used for training unit and brigade group commanders and staffs. The fidelity of the command and staff trainers at the brigade group level is such that it can effectively practise essentials procedures of command, co-ordination and decision making. Collective training and confirmation events at Level 7 will normally be done using simulation. Level 6 competencies will be practised using simulations but confirmed under field training conditions, ideally under WES conditions.

59. WES will support force-on-force or force-on-target battle stands and exercises. The training enhancement achieved from the use of WES cannot be overstated. All soldiers use their actual combat systems fitted with simulation equipment. Soldiers engage and achieve results based on their tactics and gunnery skills. All players are vulnerable to enemy and friendly fire. WES will deliver realistic, challenging and objective battle focused training for the Army. The AAR capability will provide a credible, objective evaluation of a unit's tactical engagements. Once these simulations have been fully fielded, all confirmation events at Levels 5 and 6 will be conducted under WES conditions.

## SECTION 8
## CONCLUSION

60. The requirement for highly disciplined collective training focused on specific objectives has always existed in the Army. In an environment of increasingly broad roles and tasks and decreasing opportunities to prepare for each task, the Army must extract maximum value from every training opportunity. Therefore, it is imperative that collective training be well planned and focused, and the effectiveness of the training verified.

61. Fortunately, the critical path to achieve disciplined collective training exists in the Army: it is the application of the ASAT. This disciplined and analytical approach ensures that training is relevant, focused and oriented to results. Confirmation of the results of collective training events and analysis of trends will continually improve the conduct of training. The result will be an Army that is optimally prepared for its myriad of assigned roles and tasks. The end state of a unit's training phase should be MLOC 6—with the unit being highly cohesive and ready to commence TMST for a specific operational deployment.

# CHAPTER 6
# TRAINING CANADA'S RESERVES

## SECTION 1
## INTRODUCTION

1. Chapter 1 presents training principles applicable to the Army as a whole. Despite the distinct nature of the Reserve Force, these training principles are as applicable to the Reserves as the Regular Force. However, the unique characteristics of the Reserves demand that the application of certain principles and their resultant training management considerations be viewed differently. This Chapter will explain those realities and the key requirements of training the Reserves.

## SECTION 2
## THE ROLE OF THE RESERVES

2. Chapter 2—"Training and Operations"—identifies the four stages of mobilization for Canada's Army:

a. **Mobilization Stage 1**. Includes deployments on forecasted operations by Regular Force units augmented by individuals or sub-sub-units of reservists who will conduct work-up training with the deploying unit.

b. **Mobilization Stage 2**. Envisions operational deployments sustained by Reserve augmentation up to and including Reserve sub-units. The augmentees will conduct pre-deployment training to current Regular Force standards and under the Regular Force formation.

c. **Mobilization Stages 3 and 4**. Foresees the need for an expanded Army in which the Reserve Force forms the core for mobilized units and formations. Units will undergo specifically designed training reflecting the threat assessment and time available but featuring much more specialization of skills than is currently practised in the Regular Force.

3. Therefore, while individual augmentation is part of the Reserve Force's role, it is not its sole reason for existence, nor is augmentation necessarily the Reserve's most important role. The Reserve Force provides the Army with a needed presence in communities across Canada—the citizen soldiers of the Reserves are a valuable connection between the Army and Canadian civilians. The Reserve also exists to underwrite the Army's ability to respond to unforeseen situations. The Reserve Force provides the structure for a sustained national war fighting capability. Army strategic guidance, therefore, has directed that training fit the Reserves for its role in all phases of mobilization.

## THE CHARACTER OF THE RESERVES

4. The Reserve Force must be trained in a manner consistent with its particular characteristics. The most important of those characteristics are:

a. **Terms of Service**. The retention and deployment of Reserve soldiers relies on voluntary service. The majority of Reservists serve in a "part-time" capacity and must balance military commitments with school and other employment. Therefore, Reserve service is constrained by uncertainty regarding availability and duration.

b. **Internal Dynamics**. Reserve soldiers possess various levels of skill, experience, availability and commitment. The most experienced Reservists are the functional equivalent of their Regular Force counterparts; others view their role in a traditional sense, embodying the fine heritage of Canada's "Militia", trained in the essential elements of combat craft and prepared to answer the call of full-time duty when necessary.

c. **Demographics**. In many respects, the Reserve Force is very different in composition from the Regular Force. For example:

(1) **Age**. Reservists are generally younger than their Regular Force counterparts.

(2) **Education Profile**. A considerable number of Reserve soldiers under the ranks of Sergeant or Captain are students. Reservists are generally well educated, and this must be considered when designing training; it must be challenging and rewarding in order to facilitate retention of personnel.

(3) **Turnover**. Reserve Force attrition is very high, with the greatest turnover at the Developmental Period (DP) 1 level for both officers and NCMs.

(4) **Motivation**. Young Canadians join the Reserves for obvious reasons—a part-time job and a chance for adventure. After a period of service, motivation assumes greater dimensions and long-service individuals generally remain highly motivated and loyal to the institution they serve.

## SECTION 3
## THE TRAINING REQUIREMENT

5. In the Reserves, the concept of "train to need" is applied differently than in the Regular Force. Need is only partly driven by the current operational tempo of the Army. Reserve Force training relates more particularly to the requirements of recruitment and retention. "Need" is primarily the provision of basic training for recruits and essential battle-focussed training necessary to provide challenge to older soldiers and leaders. While Reserve Force training supports the Regular Force augmentation requirements—this is not the primary purpose of Reserve training. Rather, the health of the Reserve unit itself must remain the main purpose, and effective training that supports retention is the way to ensure that health.

6. Current strategic guidance prescribes a Reserve training focus at sub-unit level and below. This focus is geared to produce soldiers capable of individual to sub-unit augmentation. However, this focus does not preclude training above sub-unit level. Reserve units, brigades and Land Force Areas may tactically group soldiers into larger entities in order to maximize the value of a training event. This is an important point, for if the Reserve is to succeed at training and retaining its soldiers at and above DP 2 (officers) and DP 3 (NCMs), it is essential that the challenge and fulfilment of training be afforded to all ranks.

## DESIGNING RESERVE TRAINING

7. The method outlined in Annex D for the identification of "training needs" is valid for the Reserves. When designing training it must be appreciated that formal, centrally delivered training may not always be the best solution to fill Reserve training requirements. Decentralized delivery of training should be utilized whenever possible via self-development programmes or distributed learning. Emphasis upon decentralized delivery affords huge advantages for transition to Mobilization Stages 3 and 4, as it more easily adapts to higher throughput requirements than centralized training. In some cases, particularly in the case of technical skills, it may be more efficient and cost effective to assist a Reserve soldier to gain equivalency than to train him on traditional courses. In other cases (e.g., when trades training is the issue), recruitment of persons who already possess the desired skills may be the best solution. In all cases, however, the sanctioned training standards must not be compromised.

8. Formal centralized course training should not exceed 11 training days in a single two week period. These blocks, once defined, can be combined to produce a course of longer duration if instructors and candidates are available for extended periods. The design of sanctioned Army course training plans (CTPs) in modules will allow Reserve soldiers to acquire a critical mass of training given to their Regular Army counterparts, but over a longer period and by methods that meet local requirements. Modularity and flexibility of delivery do not negate the requirement for consistency of standards.

9. Reserve training plans (TPs) are derived from the same qualification standards (QS) and battle task standards (BTS) as the Regular Force. QS and BTS writing boards determine essential, supplementary and residual components of each standard. Reserve instruction will focus on essential components, with other supplemental and residual material clearly defined by performance/enabling objectives (PO/EO) and sub-tasks. A portion of the residual skill and knowledge will be composed of skill sets particular to the Regular Force. It can be assumed that Reserve soldiers will never need to learn these skills except if required for component transfer to the Regular Force. The supplemental portion of each QS or BTS will contain material that can not be covered by the Reserve Force because it is not required on Class A service, or because the lack of training time and resources preclude supplemental training.

10. Reserve TPs, so reduced, will be directed toward producing soldiers qualified to undergo collective training in their units. The collective training will follow the Training Levels 1-4, but the specific BTS used will only be the essential portion of the BTS used by the Regular Force. The difference will be considered as the supplemental portion of the BTS, representing a "delta" for collective training should formed Reserve sub-units augment the Regular Force.

11. QS and BTS training represents the essential level of capability (ELOC) deemed necessary for the Reserve Force to be ready to fulfil its dual role of augmentation and expansion. It is to be regarded as the minimal skill and knowledge set necessary for maintenance of a core combat-capability in the Reserve Force. The relationship of ELOC to MLOC (minimum level of capability) is explained in Chapter 2.

12. In order to augment Regular Force units, Reserve soldiers must receive portions of the supplemental material of the QS and BTS not included in their ELOC training. The exact scope of this delta training is dependent upon the positions the augmentees will hold in the Regular Force unit, their individual qualifications and their previous collective training experience. The training delta should include the supplemental portions of QS needed for the augmentees to be able to perform tasks as part of Regular Force team, and it should include supplemental portions of BTS needed to prepare Reserve sub-units to perform tasks as part of a Regular Force contingent. The training delta should not include residual material. Judgement is required in determining supplemental training requirements.

13. Insofar as possible, supplemental training should be conducted within a collective training context designed to improve troop/platoon or sub-unit performance. Once supplemental training has been confirmed, Reserve augmentees will continue to train with the Regular Force unit to the assigned MLOC standard and onto theatre and mission-specific training (TMST).

14. The Directorate of Army Training will provide guidance for the calculation of individual and collective training deltas. The actual determination of supplemental training requirements is the responsibility of the Land Force Area, as the force generating headquarters, but it should be managed and conducted at an area training centre (ATC) or within the receiving unit or both. Judgement is needed when determining the scope of delta training. The aim is to give credit where possible, and avoid unnecessary training, but also to ensure appropriate standards are enforced, allowing proper management of risk.

15. Training in the ATCs will follow sanctioned course training plans. Subsequent training in Reserve units during continuation training and professional development (PD) may address some of the supplemental training requirements outlined above. Commanders are encouraged to have a plan to address supplemental training requirements if possible.

16. Some units of the Reserve, particularly units holding unique trades and skills (e.g., nuclear, biological and chemical [NBC]; psychological operations [PSYOPS]; civil-military cooperation [CIMIC]) may sustain a higher readiness state than other Reserve units. The requirement for supplemental training will be considerably less for these units, as it is critical that such personnel be available for deployment at reduced notice to move timings.

17. While mobilization planning is still evolving, it is envisioned that the training for mobilization will build directly upon ELOC, with specific war fighting skills and knowledge being the focus of supplemental training. DAT is responsible for the development of plans that must address the transition requirements between ELOC and MLOC in a mobilized force.

18. All Reserve individual training must be validated in accordance with the principles in Chapter 4. It is especially critical that candidates have a chance to comment on courses and that those comments be taken seriously. Feedback mechanisms are critical as failure to provide

training packages that challenge and attract recruits and soldiers will have disastrous effects on Reserve recruiting and retention.

## CALCULATING TRAINING DELTAS

19. Experience is the most substantial gap between Reserve and Regular Force soldiers. Many Reserve soldiers will not have previously deployed on a mission. Many will not have participated in a prolonged exercise, or trained within an organization larger than a sub-unit. Reserve soldiers may have learned skills on courses, but they may not have repeated them with the same frequency as their Regular Force counterparts. Regular Force soldiers will have used operational equipment (night vision equipment, Eryx, LAV III etc.) which may not be used in the Reserve Force due to cost and time constraints. Experience can not be easily addressed in formal supplemental training and is best reduced by employment of Reserve soldiers in jobs that facilitate experiential learning.

20. There may also be a substantial difference in the duration of formal training received by Reserve soldiers and their Regular Force counterparts. The resulting gap, however, is often less extensive than might be assumed. The following table summarises the training gap existing between an infantry private trained through the current Reserve system (QL 2/3 Reserve infantry) and his Regular Force counterpart.

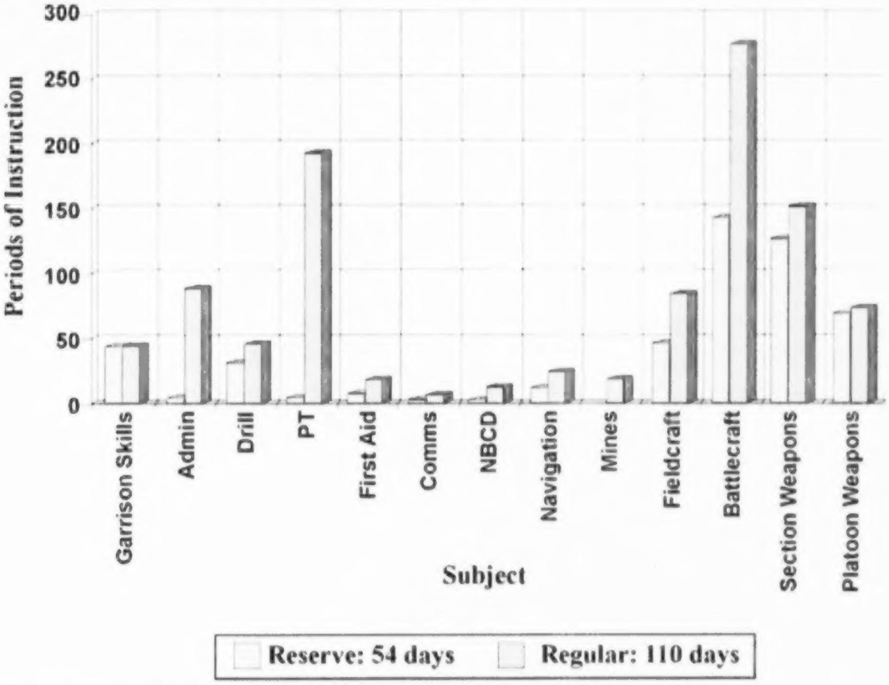


**Figure 6-1: Training Gap QL2/3 Infantry, Regular/Reserve.**[9]

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[9] This chart is not authoritative and is provided as an illustration only. POs have been grouped into general categories. "Garrison Skills," for example, includes all mandated personnel life-skills training, along with general

21. While apparent gaps exist across the board, not all of these should be addressed in supplemental training. The training delta, in short, is never the sum total of the gaps created by the differences between essential and supplemental components of QS or BTS. For example, Regular Force soldiers will have experienced almost 200 periods of PT on QL2/3, against only 6 scheduled periods for Reservists. It is doubtful that this 20 days of training will ever be delivered in the Reserve training environment. The "Fieldcraft" gap (48 periods for Reservists versus 84 for Regular Force soldiers) includes one-half day training in assault boats and several days training winter indoctrination. Most of the remainder is accrued during the confirmation exercise (1 day for the Reserves versus 4 1/2 days for the Regular Force). "Battlecraft" (143 periods for the Reserves and 273 for the Regular Force) includes, for the Regular Force soldier only, one day urban operations, one-half day helicopter drills, two days AFV recognition, one-half day rappelling and a five day live fire exercise. The LF Reserve TP includes none of this material. Some of this may be done during Reserve collective training events. Mine awareness is not taught anywhere to Reserve infantry soldiers, aside from a quick brief at their unit prior to IBTS testing. Mine training is a supplemental portion of the QS and is, therefore, a must-train delta, which should be completed prior to joining a Regular Force unit.

22. Supplemental training guidance will be formulated assuming progression from ELOC to MLOC for operational deployment with a Regular Force contingent. There is no change to the current understanding that Reservists are fully capable of assisting with emergencies such as disaster relief on short notice when required.

## SECTION 4
## THE RESERVE TRAINING CYCLES

23. The progressive phases of the Force Generation Cycle are critical to sustaining the Army's collective training system. Due to the nature of the Reserve Force, however, the phases cannot be made to apply uniformly across the Reserve. Regular Force training must be responsive to operational requirements and scheduled deployments. With the exception of specifically tasked high-readiness, special-skill Reserve units, the Reserve training is in large part regenerative—with units in the armoury remaining at ELOC except during Mobilization Stages 2, 3 or 4. Reserve units concentrate their efforts upon the Mobilization Stage 1 augmentation requirements of the Regular Force and the requirement to sustain a collective level of competence that facilitates Mobilization Stages 2-4.

24. Therefore, there are two distinct training cycles for the Reserve Force: the first involves an annual unit training cycle focused on the regenerative requirements of the Reserve Force; the second involves a training cycle that is synchronized with the LFA Force Generation Cycle.

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military knowledge. "Administration" includes most periods supernumerary to the QS. "Battlecraft" includes all tactical training including FTXs. "Section Weapons" are all those weapons found at section level (C7, C9, M72, Grenades); "Platoon Weapons" are those found in the platoon weapons detachment (C6, 84 mm, 60 mm Mortar).

## UNIT TRAINING CYCLE

25. The Reserve unit training cycle cannot be coupled to the Regular Army's Force Generation Cycle. It is driven by the following non-military calendars, which are critical:

a. **The School Year**. The preponderance of students in the Reserve imposes significant restrictions on training. Whatever the needs of the Regular Force might be, Reserve training must continue to cater to this reality.

b. **The Calendar Year**. The distinct recruiting season, the summer individual training period, and the limited number of temperate weather collective training days available to Reserve units in large measure drive unit training calendars. Because weather conditions vary from region to region in Canada, there is not standardized training calendar for all units.

c. **Reserve Soldiers' Life Cycle**. Short of a national emergency, most Reserve soldiers are available for intensive MLOC training and deployment only during certain life-cycle "windows." A student who joins the Reserve at age 18 as an NCM may be available following graduation from high school or three or four years later after completing college, university or a technical training course. Similarly, officers entering DP1 training in first year university or college will enter their period of maximum availability for operational deployments two or three years later, upon graduation.

26. Other significant influences on the construction of a Reserve training cycles should be noted:

a. LF Reserve training must be flexible and challenging enough to accommodate the unique characteristics of the Reserves stated above;

b. LF Reserve training needs to be cyclic in order to address skill fade;

c. LF Reserve training must be repetitive, to some extent, in order to account for the fact that all soldiers may not have attended the same collective training event; and

d. LF Reserve organizations must train allowing for redundancy in order to accommodate for possible unavailability of particular leaders and soldiers.

27. The Reserve unit training cycle, therefore, is best conceived as a regenerative cycle, not similar to the three-phase Force Generation Cycle followed in a Regular Force Army unit. While each unit training cycle is regenerative, each is also essential. If any one cycle fails to produce sufficient well-qualified leaders or soldiers, the health of the Reserve as an organization begins to degrade.

28. The unit training year begins in the fall with the arrival at the unit of new soldiers, who were usually recruited the previous spring and trained centrally during the summer. Since some of these soldiers will probably not possess all the skills necessary to make up the individual

training component of ELOC (i.e., IBTS), autumn training will focus on preparing these soldiers, with other unit personnel, for IBTS confirmation. While it is sometimes possible to progress to collective training, typically, not much can be done before the onset of winter when winter indoctrination training becomes the priority. For junior officers who have completed only a portion of their basic training and are therefore not officially employable as platoon/troop commanders, there should be structured training which furthers their qualifications. Not all their time, however, should be directed to formal training. Command skill can only be acquired by experience with soldiers. For this reason, unit commanding officers must carefully manage the PD of junior officers (and NCOs) to ensure that opportunities exist in all four developmental aspects, particularly the experiential. Chapter 3 outlines command responsibilities in this regard.

29. Collective training takes place mainly in the spring or late summer. This training is directed toward preparing soldiers for participation in exercises that will confirm their collective skills up to sub-unit level. Where a unit cannot produce enough soldiers to field an entire sub-unit, the brigade (as local force generator) should direct tactical groupings. When the BTS training requires the participation of more than one Arm (e.g., the Coy Gp BTS requires a forward observation officer [FOO] party), this grouping should be made and maintained for the remainder of the training year and, if possible, beyond that.

30. While summer is useful for leader development, it is often a fallow period for effective collective training since it is the optimal period for individual training. This is a constraint for which Reserve training must account but which it is unlikely to ever overcome. Units are involved in individual training but, in general, do not conduct it for themselves.

## RESERVE FORCE BRIGADE TRAINING CYCLES

31. BTS will be confirmed at brigade or area militia concentrations (MILCONs). In addition, dovetailing confirmation portions of tactically oriented courses with the preliminary work-up portions of a concentration can probably produce considerable savings in time, effort and expense. Each brigade should attempt to field a battalion group and an enemy force for concentrations based on tactical groupings previewed in the spring and prepared through tactical exercises without troops (TEWTs) and command post exercises (CPXs). Designated exercise unit commanders should be mentored by arrangement of the Land Force Area commander.

32. Confirmation will not be based upon observation of a single performance of a designated BTS but upon observed performance for the duration of the exercise across a range of BTS. While a unit commander may appoint subordinates to observe and report on training, confirmation of sub-sub-units is fundamentally their responsibility. Similarly, if the brigade commander directs confirmation training at the sub-unit level, it is his personal responsibility to ensure that it is conducted in accordance with Chapter 5.

33. Brigades are primarily responsible for the organization of concentrations, including confirmation of collective training to Level 4. From this responsibility a secondary, no less important regenerative function develops: brigades are also responsible for all PD training for officers in DP 3 and for NCMs DP 4 and above. As well, brigades may be responsible for the

PD of officers and NCMs in other DPs, where the collection of these soldiers for centralized training is appropriate. Significant brigade specific contributions include:

a. identification and concentration of leadership to exercise at unit level;

b. arrangement for tactical regrouping of sub-units and sub-sub-units for training;

c. organization of preliminary training, including PD, model exercises, TEWTs, computer assisted exercise (CAXs) and CPXs;

d. organization of mentors for collective training events;

e. confirmation to Level 4; and

f. local arrangements for conversion and continuation training.

## LAND FORCE AREA RESERVE TRAINING CYCLES

34. The LFA Reserve Force training cycle must be synchronized within the Army's Force Generation Cycle. This is best effected at the Land Force Area level. Unit training cycles are annual and focused on the regenerative needs of the units. The LFA Reserve training cycle should be three years long, progressive and directed toward generating soldiers and sub-units capable of augmenting the Regular Force contingents for operations and toward incremental enhancement of Reserve Force PD and the validation of mobilization plans. A principal feature of the area cycle is that, while subordinate cycles aim to confirm soldiers and sub-units to ELOC, the Area intervenes in these other cycles to select and tactically group soldiers in order to confirm supplemental training and training within MLOC for routine augmentation. This may lead an LFA commander to put each of the Reserve Brigades on different, offset cycles to best facilitate selection and training of augmenting sub-units. When an area has its Regular Force brigade in the Operations Phase, its Reserve Force brigades should be provided with formation CAX training and mobilization validation exercises as well as better field training opportunities. The BTS training for area training cycles will be designated in the SORD and be consistent with the MCF BTS training focus each year.

35. The way in which the Reserve Force augments Regular Force Army units will continue to evolve. In the past, augmentation occurred almost entirely at the individual level. Reserve soldiers were absorbed, as individuals, into Regular Force Army units. While individual augmentation will still take place, Reserve soldiers may also serve in sub-units composed almost entirely of other Reserve soldiers drawn from across the same area. There is not yet a template for the generation of these sub-units. Solutions will evolve from area practice and from mobilization planning. Issues such as terms of service must be addressed.

## SECTION 5
## CONCLUSION

36. The following key factors must be considered in the development and conduct of Reserve training:

a. Reservists are constrained by non-military factors. Therefore, they require a flexible training delivery system that is modular, decentralized to the greatest extent possible and that provides more advance notice than would be necessary for the Regular Force.

b. Turnover is a constant. Training—regenerative and basic in nature—presents a leadership challenge to build morale and cohesion leading to reductions in attrition.

c. The development and practising of officer and NCM leadership, up to Levels 4 and 5 respectively, must always be pursued, even though formal training tasks may only extend to the sub-unit level.

37. The Reserve Force plays a vital role in sustaining Regular Force operational capability during both Mobilization Stages 1 and 2. The Reserves train to meet this role with course training plans that reflect the war fighting skill and knowledge of the Regular Force. Likewise, Reserve Force collective training will impart core battle task competencies. This essential capability provides the foundation upon which the Regular Force depends to sustain large operational commitments and is also the foundation upon which the nation will build a larger war fighting capability during mobilization.

# CHAPTER 7
# LEARNING FROM TRAINING

## SECTION 1
## GENERAL

1. The Army must become a learning organization. This means more than merely reacting to changing circumstances (survival learning). If it is truly to become a learning organization, the Army must be able to seize and maintain the initiative in a world made increasingly complex by the demands of emerging technology, societal change, budgetary constraints and multiple operational commitments. A learning organization is one that, despite such complexities, can proactively shape its own future. Such an ability is possible only when an organization possesses inherent mechanisms that allow learning to occur at every level from every activity. Training is one of the most important activities conducted by the Army; one which offers an infinite number of opportunities for learning.

2. In order to better understand and take advantage of those opportunities for learning, the training systems distinguish between two distinct types of learning in training—participant learning and institutional learning. Participant learning is at the heart of Army training. We train to master skills and to acquire knowledge, with the effect of better individual and team performance—and ultimately unit cohesion. Using Army Systems Approach to Training (ASAT) methodology, schools, colleges, formations and units must strive to design training that provides the maximum possible learning from each iteration of a task. During the Design phase of training, trainers must visualize the training event from the participants' perspective and ask how these soldiers will learn the most from the conduct of such training. Learning objectives must be made clear before training commences. Tasks must be performed a sufficient number of times to guarantee acquisition of skills and knowledge. Whenever possible, fun and interest should be incorporated into the training event. In every instance, learning in training should be facilitated by the conduct of properly prepared and well conducted after action reviews (AARs). The first half of this chapter provides a doctrinal basis for the planning and conduct of AARs.

3. Institutional learning is the other distinct type of learning in training. Institutional learning occurs when the Army attempts to learn as much as possible from each major training event. It involves a number of key Army directorates and has impact on Army doctrine, training, organizations and equipment. Institutional learning from training demands early designation of learning objectives, close monitoring of training and a structured process for capturing lessons and implementing necessary change in time to improve subsequent training events. The second half of this chapter provides some basic guidelines for institutional learning.

## SECTION 2
## PARTICIPANT LEARNING

4. The are two major objectives of training in Canada's Army. The first is to leverage the greatest possible amount of learning and improvement from any training event. The second is to develop in Canadian soldiers, at all levels, the ability to learn quickly during operations and to use that knowledge to not only improve performance but to seize the initiative. Hence, the Army

must not only strive to learn the most from its training, but it must also train soldiers and teams on how to learn the most from their experiences.

5. **Fewer Tasks, More Practice**. In order to leverage the greatest amount of learning and improvement from any training event, training must be designed and conducted in a manner that provides sufficient practice to acquire and retain the necessary skills and knowledge. Performing a task or a number of tasks **once** for the sake of having said that they were conducted is not effective training. Learning theory indicates that a task needs to be practised a **minimum** of two to three times in order to be performed **proficiently** and for the skill or knowledge to be retained. Further iterations of tasks will be required to develop the ability to perform task **instinctively**. Training in the Army must be designed and conducted in such a manner as to permit tasks to be practised a minimum of two to three times. If necessary, **fewer tasks** must be trained in order to achieve this degree of practice within the time and resources available.

6. **Perfect Practice Makes Perfect**. Practice by itself is not enough. Practice must be complimented with supervision and accurate and timely feedback to ensure that soldiers and teams are learning the right skills and knowledge. Without timely and accurate feedback, it is likely that positive examples will go unrecognized and errors will be reinforced. The generation and delivery of timely and accurate feedback to participants should be accorded as much time and resources during the design of training as the actual practice of the skill itself. The manner in which feedback is generated and delivered to soldiers and teams will be one of the key factors by which the effectiveness of the design and conduct of training in the Army will be assessed.

7. **Active Participation in Learning is the Key**. Soldiers will learn and retain more if they are actively involved in the identification of the strengths and weaknesses of their own and their team's performance and in the development of means to improve. While critique style feedback may be necessary in some circumstances, particularly when time is a critical factor, it should be the exception and not the norm. By actively involving soldiers in the learning process, the Army achieves a number of additional advantages: it harnesses the valuable knowledge and experience of soldiers at all levels in order to identify problems and develop solutions; it demonstrates to soldiers that they have an important stake in the improvement of the Army; it also develops and practises their ability to learn from their own experience and to contribute to the learning processes employed by their team.

8. **Learning to Learn from Experience**. Increased tempo and dispersion on the battlefield generate an increased requirement to learn quickly, without direct supervision. Soldiers and small teams must be able to learn from their experiences and continuously adapt and improve their performance without critique style input from superiors who are located out of physical contact. To do so, soldiers and teams need processes that allow them to objectively analyze their experiences and the factors that affected them. Those processes must also permit soldiers and teams to determine what changes need to be made to improve or sustain their performance. Perhaps of most importance, those processes must enhance their ability to predict or influence future events in their favour, thus enabling them to seize the initiative.

9. Experience has demonstrated that the ability for teams to learn the most from their experiences is heavily influenced by the level of understanding of the individual members of the role that they play in the process and the most effective means by which they can contribute.

The ability of a team to analyze its own performance and develop the means to improve must be honed during training. Consequently, the employment of learning processes during training is important both to leveraging the most learning from a training event and to the **development of learning skills** for use during operations.

10. The Army has adopted the After Action Review **(AAR) Process** as its primary mechanism to assist both in wringing the most learning from a training event and developing learning skills for use during operations.

## SECTION 3
## AFTER ACTION REVIEWS

### INTRODUCTION

11. The AAR Process is about learning while training. No training activity, be it a section action, troop battle run, battery deployment, battle group relief-in-place or a brigade decision cycle, should be considered as complete unless the participants have reflected upon what they have done. The AAR is a means of conducting this analysis. In its simplest form, the AAR is a short discussion by soldiers who have just completed a task. In this case everyone, including the opposition force (OPFOR), discusses what happened and what they would do differently next time. The group then carries on with the next task and has a similar discussion afterwards. In its most complex form, the AAR is a detailed structured analysis and discussion using simulation replays and other visual aids. This chapter is written for use by dedicated observer/controllers supporting training and also for use of leaders and commanders conducting AARs during lower level practice training.

### WHAT IS AN AFTER ACTION REVIEW?

12. An AAR is a professional discussion of a training event or an operation that is focused on learning by measuring performance against set standards. The aim of such a discussion is to enable soldiers to understand what happened, why it happened, what should have happened, how they might sustain their strengths and correct their weaknesses. In short, the intent of the AAR is to foster continuous improvement. Although AARs will naturally tend to focus on what went wrong or could have been done better, the positive aspects must also be emphasized so that lessons can be learned without destroying self-confidence or respect. The major elements of an effective AAR are as follows:

a. **Active Participation**. All participants must be encouraged to contribute in AARs to facilitate the learning and improvement process.

b. **Discussion Focus**. The discussion must be focussed on a limited number of strengths and weaknesses to ensure that the best means to sustain the former and improve upon the latter are identified. The following three questions must always be addressed:

(1) What went right?

(2) What went wrong?

(3) What should be done differently next time?

c. **Timeliness**. The AAR must be conducted soon enough after the training event or operation so that actions and events are not forgotten and learning and improvement can be facilitated.

d. **Learning Reinforcement**. Offering the opportunity to mentally and physically practise the solution.

## TYPES OF AFTER ACTION REVIEWS

13. There are two types of AARs: formal and informal. Formal AARs are normally associated with confirmation training and are usually only conducted at the conclusion of company level and above training activities. Informal AARs may be conducted at any time (e.g., after a hasty attack has been completed or at the end of a several hasty attacks), including during training activities. Both types of AARs use the standard AAR format.

## THE AFTER ACTION REVIEW PROCESS

14. The AAR Process has the following four steps:

a. **Step 1—Planning**.

(1) Clearly identifying the tasks and standards that are to be performed during the training, particularly any tasks that need special focus (e.g., primary tasks in upcoming missions or tasks in which the troops had encountered difficulties in the past).

(2) Identify how information is to be collected. Will observers be employed to assist with the training?

(3) At what points in the training will the conduct of AARs be appropriate? AARs should be conducted during or immediately after each critical training activity. Critical activities are those events that are key to accomplishing each task to the specified performance standards.

(4) Where will be the best location to conduct the AARs?

(5) When possible, all individuals involved should attend the AAR. If it is determined that this attendance is not feasible, time should be allocated to permit subordinate commanders to conduct their own AARs.

(6) What training aids will help us during the AAR to establish what actually happened and to determine what needs to be improved or maintained?

b. **Step 2—Preparation**.

(1) All personnel involved in the AAR Process, particularly observers, must have a good grasp of the doctrine, tactics, techniques and procedures (TTP), and Battle Task Standards (BTS) related to the tasks being trained.

(2) Key events that must be observed (action on contact or at an obstacle, battle re-supply, etc.) must be identified.

(3) The training must be observed and detailed notes must be taken.

(4) Observations from all observers must be collected and collated.

(5) The AAR site must be carefully selected and prepared. A shady spot, out of the wind and rain, with a good view of the ground over which the training took place is generally a good location. A representation of the terrain is needed to keep terrain considerations at the forefront of discussion. AAR aids should clarify problem situations and illustrate points rapidly and effectively.

c. **Step 3—Conduct**.

(1) **Time Allocation**. It is recommended that the AAR time be broken down as follows: 25% spent on what happened, 25% spent on why it happened and 50% spent on how to do it better.

(2) **Introduction and Rules**. How familiar our troops are with the AAR Process will determine how much of an introduction and covering of the rules will be required. Points to emphasize are as follows:

(a) An AAR is a professional discussion of training that focuses on how the troops being trained performed the tasks against the required standard.

(b) An AAR is not a critique. No one, regardless of rank, position or strength of personality, has all of the information or answers. Active trainee participation in the AAR is the most important element of conducting an effective AAR. Participation in the AAR is best when each member of the training unit and the OPFOR are included.

(c) Everyone can, and should, participate if they have an insight, observation, or question that will help the unit identify and correct deficiencies or maintain strengths.

(d) An AAR does not grade success or failure. There are always weaknesses to improve upon and strengths to sustain. Therefore, it is essential to not only focus on what could be improved but to also highlight where things went well in order to reinforce future performance.

(3) **Review of Training Objectives**. The major and supporting battle tasks that were being trained should be stated.

(4) **Commander's Mission and Intent**. The commander should describe what his mission was and how he intended to accomplish it.

(5) **Opposing Force Commander's Mission and Intent**. The OPFOR commander should also describe what his mission was and how he intended to accomplish it. This reinforces to the friendly forces that they were facing a living, breathing, **thinking** opponent.

(6) **Doctrinal Review**. As necessary, the key points of what was supposed to have happened, based on approved doctrine, TTP and BTS, should be reviewed.

(7) **Summary of Events**. The critical events that had a direct impact on the results achieved should be summarized.

(8) **Discussion of Key Issues**. This discussion is the heart of the AAR and should receive the major share of the time allotted. It is in the discussion that the participants identify what went right, what went wrong and, most importantly, **why**. Identifying why something went right or wrong requires an in-depth analysis of cause and effect: "We got hit from the right flank and lost three tanks in less than a minute!" "Why?" "Nobody spotted him until after he got off his first or second shot" "Why?" "Because nobody was watching the right flank and that area in particular." "Why?" "Because everyone was focussing on the axis of advance, and that copse of woods wasn't identified as a possible enemy location during the troop leader's estimate." "What are we going to do about it?" "Review the troop SOP for that formation, and ensure everyone knows their arcs." "Ensure that we take the time to identify likely enemy positions along the axis of advance and detail a tank or tanks to cover them or make sure the supporting troop(s) can."

(9) **Discussion of Force Protection Issues**. Force protection issues include safety, maintaining operational security, implementing security measures at the halt and on the move, and measures to prevent fratricide. During the conduct of the AAR, these issues should not be forgotten or overlooked in the normal enthusiasm to discuss how the unit manoeuvred or deployed to engage the OPFOR. Force protection should be a topic of discussion throughout the AAR.

(10) **Closing Comments**. The closing comments must include a balance of the strengths and weaknesses identified and the solutions that are to be implemented.

d. **Step 4—Follow-Up**.

(1) Training must be organized so that there will be an opportunity to follow-up the points raised in the AAR(s), preferably as soon as possible after the weaknesses were identified. Doing ten different tasks once and then going home doesn't give the troops involved the opportunity to demonstrate to themselves or anyone else that they have learned. We must train for success!

(2) Points to be followed-up must be recorded to ensure that the next scenario includes opportunities to practise and observe them.

(3) If something has not been corrected during the exercise, it must be noted and included as an objective for the next training activity.

## THE ROLE OF THE LEADER

15. Soldiers are trained by their section commanders, who are in turn trained by their platoon commanders, who are trained by their company commanders and so forth. Therefore, at section level, AARs should be facilitated by the platoon commander or a designated observer/controller, at platoon level by the company commander or a designated observer/controller, and so forth.

16. The one way in which the AAR is unique is its emphasis on group participation. During a collective training event, when soldiers are often widely dispersed and using terrain for cover, it is very difficult for one person to establish exactly what happened. Although the Instrumented Range System (IRS) and the data collection and debriefing systems (DCADS) can assist, the people who can best say what went on are the soldiers themselves. They can help to describe what actually happened in their part of the battlefield as opposed to what was perceived to have happened.

17. Leaders and observer/controllers participating in the AAR play a critical role in its success. They must set the example and establish the atmosphere of professional discussion. This means they must be able to openly and maturely accept observations on their personal weaknesses that contributed to those of the team and be prepared to hear about such weaknesses from someone else, including subordinates. If leaders demonstrate that they are willing to say or hear that they forgot something, or did something wrong, then the soldiers will be willing to do so as well. Conversely, if the atmosphere is one of "we can discuss as many weaknesses as we want so long as they aren't attributed to me," the AAR will probably not achieve success.

## PARTICIPATION

18. Educational psychology research has demonstrated that active participation, as opposed to passive observation, greatly increases the amount of information a student learns and retains. Soldier participation in AARs produces group discussion in which several points of view are presented. This presentation of more than one point of view allows the soldiers and leaders to gain a greater understanding of the problems and their possible solutions. Soldiers are able to

explain the relationships that affect performance to one another in their own terms, at their own level of understanding. Participation increases the soldier's motivation by providing a sense of ownership in developing the solutions to the problems. Participation also reduces resistance to acknowledging mistakes.

## TRAINING AIDS

19. Training aids should be chosen based on the outcome desired from the AAR. Although hi-tech solutions are often extremely useful, there are times when a simple paper flip chart, a diagram drawn in chalk on the side of a vehicle or a stick-drawn sketch on the ground will enable the soldiers involved to better describe, in their own terms, what they perceive to have occurred. Active participation in the AAR is vital for success, so training aids that will support and encourage participation should be included. One of the great advantages of flip charts, chalk or a stick is that they may assist those soldiers who are not extremely comfortable in expressing themselves verbally to make their point effectively, to participate in the AAR and, thereby, to contribute to the process. Other training aids that may be used to facilitate the AAR Process include, but are not limited to, the following:

a. **Weapons Effects Simulation**. Undoubtedly, the single most important training aid developed to date that can be used to support an AAR is weapons effects simulation (WES). Coupled with a DCADS and the IRS—which collects information regarding who was engaged by whom, with what and how successfully—WES brings a whole new level of objectivity and realism to a training activity. It is difficult to claim that your attack was successful when the WES equipment on yourself and all of the other attacking soldiers is beeping, buzzing or blinking, indicating that you all have been hit. The IRS and DCADS also help to provide the added level of feedback required to analyze in greater depth why events occurred.

b. **Observers**. The Canadian Army has traditionally used personnel in an umpire/observer role during major exercises to assist in determining what transpired. However, not everyone is qualified or capable of fulfilling this function. Observers need to be skilled and have experience in the tasks being performed (credibility), know what they are looking for (experience), where to be to find it and, most importantly, know how to effectively pass on that information. Because not just anyone can provide the level of detail, precision and objectivity of WES and DCADS, the employment of skilled observers to support training is strongly encouraged.

c. **Video**. Recording and reviewing footage of what actually happened is very effective. Small hand held video cameras are now readily available and easy to use, and video capability exists in vehicles such as the Coyote. Observers accompanying the friendly force, the OPFOR or both can use video cameras. During dry training, a Coyote stationed on or near the objective or on a flank can provide video recordings of an attack or an advance that can facilitate valuable feedback during an AAR. Video recordings can also be used to illustrate to troops the improvements that they have made over the course of a series of training events. These are but two examples of the potential of video to enhance our training.

d. **Global Positioning System**. Our new family of radios and vehicles, and those undergoing retrofit, are being equipped with the global positioning system (GPS). GPS routinely records any position in which it has remained stationary for more than several minutes. This information can be downloaded to a lap top computer and later displayed to show where vehicles actually were at given times.

e. **Lap Top Computers, Data Video Projectors and Digital Maps**. Technology has given us the tools to more effectively display map information during an AAR. Lap top computers and data video projectors can be used to display tactical information on digital maps. Version 8 of the Army Lessons Learned Centre's (ALLC's) *Lessons Learned Information Warehouse* (LLIW) CD contains digital maps of all of the Canadian training areas used frequently by the Army.

f. **Terrain Models**. Terrain models can range from four pine cones on a mound of dirt kicked up by a combat boot to sophisticated kits designed for model train sets, which contain miniature vehicles and can portray everything including grid lines. Terrain models used in support of the objectives of the AAR Process are often very effective.

g. **Flip Charts and Sketches**. One of the most useful tools available to anyone conducting an AAR is the paper flip chart. With a supply of various coloured markers, the flip chart can be used effectively by both the AAR leader and the participants to describe what was supposed to occur and what they believe actually did occur. Sketches drawn with pieces of coloured chalk on the side of a handy vehicle are another possibility.

h. **OPFOR**. One of the most under utilized resources for learning from training is the OPFOR. OPFOR troops should be called upon to describe their plans, what they saw from their perspective, how they reacted and what impact the friendly force actions had on what they did. Skilful use of the OPFOR input during an AAR will allow the friendly force to better analyze what happened and why events occurred the way they did.

## TIPS ON HOW TO LEAD AFTER ACTION REVIEWS

20. The AAR leader's skill is critical to identify the potential discussion issues and to formulate a plan to best draw out those issues from a particular group. The AAR leader must tailor the AAR to the needs of the group involved.

a. AAR leaders need to be trained and developed on a continual basis.

b. Common faults of AAR leaders that often lead to ineffective or marginal AARs are as follows:

(1) They talk more than the unit members; therefore, the AAR becomes primarily a lecture presentation of the AAR leader's observations and recommendations with little input from the troops involved.

(2) They are unskilled in the use of open-ended and leading questions, or they do not use them at all.

(3) They do not ensure that all of the unit members are involved in the discussion.

(4) They do not use performance standards or specific performance feedback to focus the discussion.

(5) They do not use OPFOR representatives, 3-D terrain models or other graphic support to prompt, focus and facilitate discussion.

(6) They do not summarize or express strengths/weaknesses (lessons learned or issues discussed) in terms of a problem task, conditional factors that affect performance and performance standards.

(7) They do not require units to link performance and corrective actions to solve problems during subsequent training.

(8) They do not allow or force the group to solve their own performance problems.

c. AAR leaders must strive to do the following:

(1) Set the AAR up so that it is in a location and supported by training aids that will allow the individuals involved to visualize what happened.

(2) Allow the participants to do the talking, but guide that discussion through the use of leading questions.

(3) Ensure that the unit links the effects (what happened) to why it happened (causes) for the key events. It is only through such a detailed analysis that AAR participants will discover what is the real cause of a problem and then be able to develop an effective solution.

(4) Encourage the participants to gain "ownership" of the problems and solutions by encouraging them to identify why things happened the way they did and to develop the necessary solutions.

(5) Focus the AAR towards developing solutions. The primary objective of the AAR is to foster improvement, and that requires the development of solutions not simply the identification of problems. Discussions must contribute and lead to the development of solutions to, as a minimum, the key issues.

(6) Base the discussions around current BTS and TTP. Keep the identification of problems and strengths as well as the development of solutions centred on how they relate to current BTS and TTP. If discussion is drifting, bring it back into focus by ensuring that the description of what happened and any solutions are compared to or based on BTS and TTP.

(7) Focus on the good as well as the bad. The primary objective of the AAR is to foster improvement. An AAR will not meet that objective if it results in unit members losing confidence and respect for themselves and for their leaders. The AAR should be frank but not embarrass the individuals involved. Those things that went well must also be identified, particularly when the standard was exceeded. By recognizing those who exceeded the standard, success is reinforced and others learn from that success.

21. Participant learning from Army training must be made standard throughout the Land Force. To this end, the Army will attempt to develop a learning culture—based upon training in the conduct of AARs—in all schools, colleges, formations and units. The Army Lessons Learned Centre will have an important role in this development. In turn, commanders at all levels should do the following:

a. ensure that AARs are conducted for major training activities;

b. supervise and provide feedback to trainer and/or observer/controllers on the conduct of their AARs; and

c. ensure that the results are recorded, distributed and incorporated into subsequent activities.

## SECTION 4
## INSTITUTIONAL LEARNING

22. **Institutional Learning**. Just as its individual soldiers and teams must leverage the most learning from a training event, so must the Army. Training, particularly collective training, represents a large expenditure of the Army's precious time and resources. It is essential that the Army learn as much as possible about the effectiveness of its doctrine, training procedures, equipment and personnel from each training event so that it can continually improve in these areas. The primary tool that the Army has developed to assist it to learn the most as an institution from a training event is the **post exercise report (PXR)**.

23. The PXR is a tool that, if prepared properly and subjected to analysis, can allow the Army to gain more from its training. It represents more than just a unit's record of what went wrong or right during the planning for or deployment to an exercise. The PXR is a means to record and distribute what was accomplished by the troops involved, what went right and what went wrong as well as recommendations for changes to our equipment, doctrine, procedures and standards. By making this information available throughout the Army, the institution gains the opportunity to learn from the activities of one of its units or formations.

24. The vital information contained in a PXR should ideally be the distilled results of AARs conducted by the unit or formation throughout the training event. Those AARs should yield insights not only into the level of performance achieved but also into factors such doctrine, standards, equipment, personnel, time and resources and their impact on that performance.

25. In order for PXRs to facilitate institutional learning, they must assist in generating tangible change. PXRs must be subjected to analysis, and issues that are identified must be addressed in a consistent manner. Institutional learning will only be achieved when there is clear evidence that there has been a change in behaviour, capability, attitude or process.

## FOCUS INFORMATION COLLECTION—IDENTIFYING LEARNING REQUIREMENTS

26. The Army's training institutions already have a robust validation mechanism that produces needed change within the individual training system. For collective training an equivalent mechanism is required. This mechanism involves, firstly, an identification of what the Army needs to learn/validate from significant training events (e.g., live fire or force-on-force at Training Levels 5-7). Learning/information requirements can come in the form of a critical topic list (CTL) from Army senior leadership or from specific commander's critical information requirements (CCIR) pertaining to training or other combat development issues. These may include validation of new equipment/doctrine or TTP. The Army Lessons Learned Centre (ALLC) will collate these information requirements and amend the relevant post operations report (POR) and PXR formats to collect the information. Observer/controller organizations will be tasked to formulate an appropriate observation and information collection plan, which will incorporate CCIR and CTL requirements. An ALLC representative will work in conjunction with the observer/controller organization at the training event to ensure that the information requirements are manageable.

## COLLECT, COLLATE AND ANALYZE INFORMATION

27. At each major training event the Army will have representatives from the ALLC, the Directorate of Army Training (DAT), and possibly the Directorate of Army Doctrine (DAD) and the Directorate of Land Requirements (DLR). These representatives will work in conjunction with the observer/controller organization to observe the training event and to gather information on specific combat development issues. As well, they will have full access to all AARs conducted and AAR products produced during the training event. Their observations may be collated in the ALLC's PXR, or separate directorate reports may be written. These reports will be forwarded to COS Land Force Doctrine and Training System (LFDTS), or Director General Land Staff (DGLS) for DLR reports, where the requirements for further staffing will be determined. In addition, the ALLC will produce an annual report that summarizes the major observations and lessons learned from operations and training over the past 12 month period, highlighting trends.

## ASSIMILATE AND FOLLOW-UP NEW LESSONS IN DOCTRINE AND PROCEDURES

28. Change deriving from staff reports and PXRs will be initiated through DGLS/COS LFDTS directive or, if required, through the combat development process (the Army Strategic Planning Process). Doctrinal, training, organizational and equipment issues should be addressed and staffed through the appropriate directorate. The Land Force will be made aware of combat development changes and receive guidelines on implementation. Subsequent command and staff visits will confirm the effectiveness of such changes, and the ALLC will monitor change issues to gain feedback and to determine if further action is required. The speed with which the Army can implement this change mechanism will vary between issues. Nevertheless, whenever possible, change should be effected in time for subsequent major training events can benefit from the lessons learned.

## INCORPORATE LESSONS LEARNED INTO TRAINING

29. Using the ASAT methodology, Army schools, colleges, formations and units should incorporate new lessons learned into training. This could occur during the needs assessments conducted for individual training or during the Analysis and Design Phases of collective training. The Army will attempt to facilitate the incorporation of new lessons learned into training with applicable written doctrine or doctrinal amendments and with training policy amendments as required.

## SECTION 5
## CONCLUSION

30. The Army must gain maximum value from every major training event it conducts. Such training is inherently expensive, it involves detailed planning and co-ordination, and it takes soldiers away from their homes for extended periods. Such training should, therefore, involve challenging and relevant training that facilitates participant learning and builds cohesive sub-units and units. It should also have maximum value to the Army's ongoing combat development. Toward these dual aims, it falls upon commanders who are organizing training to design training events that include comprehensive AARs and that address the Army's concerns regarding doctrine, TTP, equipment issues or training procedures. The creation of a Canadian Manoeuvre Training Centre, equipped with WES, will simplify the staffing and preparations required to effect learning. Until then, the Army will task commanders to plan training that provides both the soldier and the staff officer the information they need to learn and to make change.

## ANNEX A
## ARMY TRAINING AND OPERATIONS FRAMEWORK

1. The Force Generation Cycle is depicted in the figure below. This cycle ensures that support is provided to the Army's individual and collective training systems; it takes an ordered approach to unit reconstitution, guarantees unit personnel stability during the Training Phase, and it maintains currency of skills during the Operations Phase.

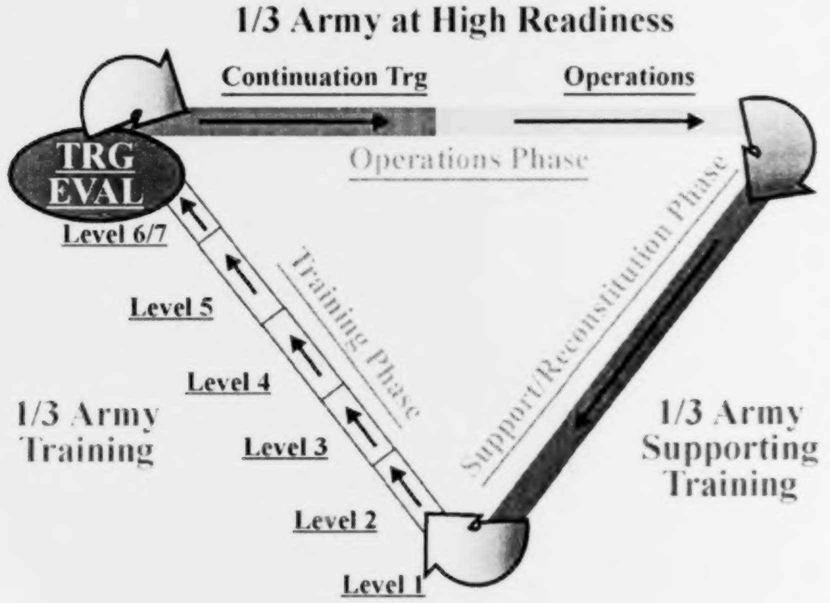

**Figure A-1: The Force Generation Cycle at Unit/Sub-unit Levels**

2. Each of these phases can be of a different length, but all should be approximately one year. Applying the seven levels of training in the Training Phase results in an ordered progression to the required competency for the assigned mission. There is an orderly, focused progression of training, which leads to a unit or formation confirmation training event (eventually at the Canadian Manoeuvre Training Centre), at which point the unit is declared combat ready to a minimum level of capability (MLOC) standard. The Training Phase is followed by the Operations Phase, where the skills are employed. The inevitable skill fade is addressed through various training events, some programmed as Army collective training taskings and some mandated for specific mission readiness. During both the Training and Operations Phases, unit personnel should not be subject to individual tasks, and they should not be posted. In the Support/Reconstitution Phase, the unit enters a refit period where it upgrades equipment, changes command, sends candidates on career courses and responds to tasks. Where possible, support tasks should be grouped together and executed in a coordinated manner.

# ANNEX B
# COLLECTIVE TRAINING

## SECTION 1
## CONFIRMATION METHODOLOGY

### INTRODUCTION

1. The Army Systems Approach to Training (ASAT) endorses a teach, practise and evaluate methodology. In collective training, this methodology reflects preliminary training, practice and confirmation. While evaluation has long been part of the Army's individual training system, confirmation has not been a frequent component of Army collective training. Yet, without confirmation, commanders are restricted to subjective judgements on the ability of units to achieve training standards. The Army collective training system demands more rigour in the application and validation of standards and will use the confirmation methodology described herein to fulfil this demand.

2. Confirmation is a formal check whereby the group passes through a "gateway" to the next higher training level or to a more advanced readiness state. Confirmation follows progressive preliminary training and practice periods (involving iterations of a particular BTS). Proper confirmation requires a valid set of standards, a methodology, the appropriate personnel and tools, and analysis by a confirming commander.

3. The purpose of confirming collective training is to compare the intended performance objectives—battle task standards (BTS)—against the results achieved.

4. There are two types of confirmation: informal and formal.

   a. **Informal Confirmation**. While theoretically all training activities should be confirmed by the commander two levels higher in the chain of command, the practicality of doing this uniformly throughout a unit is questionable. Therefore, for lower level training conducted with unit resources, an informal confirmation methodology is employed. Informal confirmation has the same aim as formal confirmation; however, less resources are devoted to it. Informal confirmations may be conducted by the commander one level higher in the chain of command for low level gateway events. For example, the platoon commander can confirm the section's competency in the skill of establishing a fire base (which is necessary gateway training for proceeding to platoon attack training) by observing and drawing conclusions from what is seen, heard and, if weapons effects simulation (WES) is employed, sensed. Upon progressing to higher level BTS, however, confirmation of critical BTS should be conducted by the commander two levels higher in the chain of command. While dry platoon attack training may be confirmed by the company commander, live fire iterations, or force-on-force iterations using WES, should be confirmed by the battalion commander himself. The methodology needs be no more sophisticated then his observation of the attack and an assessment of it based upon the written BTS (and TTP) and his experience. The integration of WES into unit training will make a commander's assessment easier, while still keeping it informal. A unit commander is responsible for prescribing the confirmation methodology to be used within unit training.

b. **Formal Confirmation**. This type of confirmation is conducted by the commander two levels higher in the chain of command and requires a supporting structure consisting of observer/controllers, mentors, an enemy force with WES, and logistical and administrative support. Formal confirmations should be live fire and then force-on-force using WES or be supported by simulations for command post exercises (CPXs). They are conducted to confirm combat team, battle group and formation achievement of a level of competency required to advance to the next training level or to be declared at a higher readiness state. The intent is to determine the ability of the formed group to achieve the assigned collective battle tasks. In so doing, group strengths will be reinforced and areas for improvement identified. The purpose is not to assess the performance of individuals.

## CONFIRMATION RESPONSIBILITIES

5. In keeping with the principles that training is a function of command and all training must be confirmed, the following table details responsibilities for collective training:

| TRAINING LEVEL | UNIT IN TRAINING | TRAINER | CONFIRMATION AUTHORITY |
|---|---|---|---|
| **(a)** | **(b)** | **(c)** | **(d)** |
| **7** | Brigade Group | Area Commander | Commander LFDTS |
| **6** | Non-manoeuvre Unit/Battle Group | Brigade Commander | Area Commander |
| **5** | Combat Team | Battle Group Commander | Brigade Commander |
| **4** | Squadron/Company and Arty Regt | Unit Commander | Unit/Brigade Commander |
| **3** | Troop/Platoon | Battery/Squadron/Company Commander | Unit Commander |
| **2** | Detachment/Crew/Section | Troop/Platoon Commander | Battery/Squadron/Company Commander |
| **1** | Soldiers | Detachment/Crew/Section Commander | Troop/Platoon Commander |

6. Land Force Area commanders are responsible for the confirmation of battle groups. Brigade Commanders are responsible for the confirmation of combat teams. Land Force Area

and brigade headquarters are both expected to support integral battle group and combat team confirmation events. Land Force Area headquarters will be tasked to support Commander Land Force Doctrine and Training System (LFDTS) for confirmations of brigade groups.

## SECTION 2
## FORMAL CONFIRMATION METHODOLOGY

### GENERAL

7. Confirmation is a process used to measure the ability of a formation, unit or sub-unit to achieve a BTS. When properly conducted, confirmation possesses the following attributes:

a. **Confirmation is Non-intrusive**. The commander of the formation, unit or sub-unit undergoing training (the Training Commander) assists in the setting of training goals and the development of the confirmation plan and is consulted if any modification of the conduct of the exercise is required.

b. **Confirmation is a Command Responsibility**. While observer/controllers may assist the confirming commander by providing observations and data (using WES), they do not themselves confirm the training. Confirmation remains the responsibility solely of the confirming commander.

c. **Confirmation is Conducted by Organized, Competent Observer/Controller Staff**. The source, scaling and organization of the observer/controller staff will be defined in early exercise planning and as the exercise requirements evolve. Care must be taken in the selection of personnel for this task. They must be mature and competent in the activities they will confirm.

d. **Confirmation is Unobtrusive and Constructive**. The observer/controller teams will require freedom of movement throughout the primary training audience (PTA) headquarters and tactical positions and will have unrestricted access to all command and staff activities. This access is most easily accomplished if the commanders of the PTA issue instructions to the staff to welcome the observer/controller teams and to explain the importance of their work. In return, the teams must strive to establish a positive rapport with the PTA. They will accomplish this by completing their confirmation unobtrusively, constructively and without disrupting the activities of the PTA.

8. Formal confirmation methodology applies to all Army collective training at or above combat team level. All types of Army collective training exercises, whether a CPX, computer assisted exercise (CAX) or field training exercise (FTX), will include confirmation as an integral element of the exercise. While it is difficult to standardize the procedures connected with confirmation, the methodology outlined below shall be followed in the planning, conduct and reporting of confirmation.

## DESIGNING TRAINING CONFIRMATION

9. When designing training for confirmation, the following must occur:

a. identification of the exercise director[10] and other principal control appointments;

b. definition of the exercise aim[11] and training objectives [12];

c. identification of the exercise participants, including:

    (1) the primary training audience (PTA),

    (2) the secondary training audience[13] (if any), and

    (3) the control/confirmation staff[14];

d. definition of the duration of the exercise;

e. identification of the exercise venue;

f. selection of the type of exercise (CPX, CAX, FTX, etc.); and

g. decision as to what BTS training activities, or portion thereof, will be confirmed.

## TRAINING CONFIRMATION STAFFS

10. The confirmation of collective training at combat team level and above will be assisted by independent, objective and trained observer/controller teams that are superimposed on the

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[10] The exercise director is the officer responsible to train the PTA in accordance with the exercise aim and training objectives. The exercise director is not a member of the PTA. He is normally of equal or higher rank to the commander being trained and may be the immediate superior of that commander.

[11] The exercise aim is the statement of the purpose of the training to be conducted.

[12] A training objective is a statement that describes the desired outcomes of a training activity. A training objective is comprised of three, clearly defined facets: tasks (clearly defined and measurable BTS to be accomplished by soldiers and units), conditions (the circumstances and environment in which a BTS is to be performed) and the standard (the minimum acceptable proficiency required).

[13] The secondary training audience consists of supporting elements and control staff who assist in the training of the PTA. Through their own participation in the training delivery, the secondary training audience derive cascading training benefit, even though they are not the focus of the main training effort. For example, lower control command posts during CPXs may be secondary training audiences; just as sub-units may be in a BG confirmation field exercise.

[14] Exercise observer/controllers assist the exercise director to deliver the training. They also observe the PTA and apply defined standards to assist the confirming commander to assess PTA competency in particular BTS.

command and staff structure of the sub-unit, unit or formation being exercised. These teams should be involved in the preliminary and practice training prior to confirmation, assisting group learning through the conduct of informal and formal after action reviews (AARs). In order to maintain objectivity, the observer/controller teams will be established as a separate entity under a chief observer/controller who works for the exercise director. Such a structure maintains these relationships:

a. the exercise director will not be the commander-in-training but may be his immediate superior—the trainer—or may be appointed by the trainer;

b. the chief observer/controller is responsible to the exercise director;

c. the exercise director is responsible to the confirmation commander for all matters concerning the preparation and conduct of confirmation; if the exercise director is not the trainer, then he will involve the trainer in all matters involving confirmation preparation and will report on the results of confirmation;

d. the observer/controller teams are responsible to the chief observer/controller.

11. **The Observer/Controller Teams**. The composition of observer/controller teams will vary according to the level of training being conducted (e.g., brigade group or battle group), the method of conduct (e.g., FTX, CPX or CAX), the number of standards being confirmed, the resources available, etc. Normally, support to the observer/controller teams should come from resources outside those of the training commander. Shortfalls in support must be identified early in the planning process and reported to the exercise director. The shortfall will normally be met from the exercise director's resources or, if necessary, staffed higher through the chain of command for additional tasking. As an example, a brigade group FTX exercising several battle groups is the most complex Army training scenario requiring confirmation, and support would be drawn from across the Army. Significant resources would be required to support confirmation that provides immediate observation and feedback to sub-unit, unit and formation commanders as well as timely collated observations to the chain of command. Conversely, a combat team battle run would require a significantly smaller and less complex confirmation team in support, which could be generated from the brigade or LFA. In general, an observer/controller structure should be built upon these components:

a. **An Observer/Controller Staff Team**. The chief observer/controller must be directly supported by a number of competent subordinates, who will conduct the detailed preparation and staffing of observer/controller, AAR and/or confirmation plans on behalf of the exercise director. During practice training and confirmation, this staff co-ordinates the activities of the observer/controller teams and collects, collates, analyzes and distributes their observations to the exercise director, the commander-in-training, the trainer, the confirming commander, and the Army liaison and staff officers attending that training event. The observer/controller staff members also facilitates formal AARs and they prepare detailed observation reports.

b. **Observer/Controller Teams**. Observer/controllers should have command and staff experience appropriate to the level of unit or branch they are observing. The teams must be organized and manned to match the pace of operations for the duration of the exercise. A team may consist of merely a single officer and driver for observing and confirming training at platoon or troop level. Observer/controller teams with a combat team should have a representative of each combat arm and may have others. Teams observing and confirming CPs will be larger, representative of the full range of combat, combat support and combat service support functions being controlled from that particular CP. Each team will include drivers, communicators and technicians, as required, to keep the teams with the sub-unit/units being trained.

c. **Support Staff**. The observer/controller organization must be supported by sufficient drivers, communicators, and administrative and technical support staff to ensure continuous execution of the observer/control function is achieved for the entire training period.

## TRAINING CONFIRMATION PHASES

12. The confirmation process is broken down into three phases: preparation, confirmation and post-confirmation. These phases are described as follows:

a. **Phase One—Preparation**. The preparation phase is the key to a successful confirmation of collective training. To commence preparation, the exercise director and the commander-in-training verify the training aims and objectives. Similarly, they will agree upon the configuration and allocation of observer/controller teams and a concept for how the confirmation will be conducted. The chief observer/controller will take this concept and produce a confirmation plan. The plan must be approved by the exercise director and both the commander-in-training and the confirming commander. Upon approval by the exercise director, the commander-in-training and the confirming commander, the confirmation plan is disseminated through the chain of command to allow for the assembling and training of the observer/controller teams prior to the conduct of the exercise. The plan is comprised of the following components:

    (1) the standards being confirmed;

    (2) the resources available;

    (3) the observer/controller team composition;

    (4) an observation and collection plan;

    (5) the feedback and AAR concept; and

    (6) the requirements, format and time lines for the exercise confirmation report.

b. **Phase Two—Confirmation**. During this phase the observer/controller teams assist and observe training in accordance with the confirmation plan. Continual collection, collation and review of observations from team members assists the exercise director, and the commander-in-training and confirming commander to acquire a more complete account of those actions contributing to the achievement of training goals and areas to improve upon. If the exercise design allows for it, the observer/controller teams may assist training by conducting AARs throughout this phase, as happened during the practice training. These AARs will be reported to the exercise director, and AAR notes will be collated for more accurate confirmation reporting. This process is responsive and flexible enough to allow the exercise director or the training and confirmation commanders to amend the conduct of the exercise in order to emphasize a particular training requirement. The confirmation commander will have the final say on whether or not a specific BTS or set of BTS has been achieved in the training conducted.

c. **Phase Three—Post-confirmation**. On completion of the exercise, the immediate concern of the observer/controller teams is to provide a constructive AAR to the training unit. Shortly after the completion of training and prior to redeployment (e.g., at brigade level, within 60 hours of ENDEX), the training commander should also receive from the exercise director and the trainer and the confirming commanders a verbal debrief on the conduct of the exercise. This debrief will allow the training commander to reconcile events, analyze to what extent the training aims and objectives were met, and highlight significant strengths and weaknesses that could affect future training. This process must be interactive to allow the training commander to discuss elements of training with all parties prior to the compilation and distribution of the final AAR report by the observer/controller staff.

## REPORTING

13. Reports from confirmation events will be collated by the observer/controller staff and passed to the exercise director, the training commander, his commander and the confirming commander. They will also be distributed to the Army Lessons Learned Centre (ALLC) or other Land Force Doctrine and Training (LFDTS) representatives attending the confirmation event(s). Broad dissemination of exercise AAR reports will facilitate identification of common shortcomings and assist in the analysis of trends that may indicate shortfalls in training, equipment, tactics, procedures, etc. Subsequent directives for improving shortfalls will be issued by Commander LFDTS on behalf of the Chief of Land Staff.

## DEVELOPING AN EXERCISE CONFIRMATION PLAN

14. **Confirmation Criteria**. The conduct of confirmation is based on an objective analysis of the collective performance of a tactical organization in an operational setting. The goal is to determine collective competency in a particular range of skills (BTS) to ensure readiness to advance to higher level training or to assume a higher readiness state. A confirmation plan is

used by the observer/controller organization to gather the information needed by the confirming commander to make his decision on confirmation. Specifically, the plan will attempt to gather the following information:

a. What was planned?

b. What actually happened?

c. What was done well?

d. What was not done well?

e. What actions are required to achieve the required operational standard?

15. **Confirmation Collection Plan**. A confirmation collection plan should be developed to provide both the training unit and the observer/controller team with a clear understanding of the organization and design of the exercise and the focus of confirmation activity. The following information is included in a confirmation collection plan:

a. the name and position of the confirming commander, the exercise director and the chief observer/controller;

b. the names, appointments and structure of the observer/controller team;

c. the exercise aim and training objectives that are the foundation upon which the confirmation is conducted;

d. any guidance provided by the exercise director with respect to the focus of the confirmation effort;

e. the extent to which informal AARs, if any, will be allowed during the confirmation training event;

f. the specific BTS to be confirmed, including the task, condition and standards;

g. the doctrinal references that will be used to support the confirmation;

h. the method(s) used to obtain and review all written orders, graphics and other products generated by the PTA; and

i. the following will be defined, in matrix format, in the confirmation collection plan:

   (1) the key events;

   (2) the key events that will be confirmed;

   (3) when those events will occur;

(4) where those events will occur;

(5) the specific actions (BTS) that will be confirmed;

(6) the personnel that will be responsible for observing the specific BTS event(s) requiring confirmation;

(7) the means (technologies) and methods that will be used to gather the information needed; and

(8) the method(s) that will be used to record the observations from the exercise, particularly with respect to the occurrence of key events and the confirmation observations that flow from them.

16. **The Observer/Controller Deployment Plan**. Normally, it will not be possible to establish an observer/controller organization with sufficient depth to observe every component of the PTA continuously throughout the duration of the exercise. Therefore, it may be necessary to define confirmation points of main effort in time and space in order to observe activities as they unfold with the minimum required co-ordinated observer/controller staff effort.

## OBSERVER/CONTROLLER TRAINING FOR CONFIRMATION

17. Observer/controller staff may require training prior to an exercise. This training should include the following facets:

a. a detailed exercise briefing;

b. an explanation of the confirmation chain of command;

c. an explanation of the confirmation collection plan and the tasks assigned to the observer/controllers;

d. the provision of references and lectures (if required, on the doctrinal activities that are to be confirmed);

e. the confirmation schedule (e.g., will there be specific pauses in the exercise to collate confirmation observations following defined periods of exercise play, or will there be one confirmation session following ENDEX?);

f. an explanation of the technical support available to capture digital imagery or statistical data in support of the exercise confirmation effort (simulation training, for example, offers powerful means to capture, display and collate these visual and analytic tools);

g. the roles of the observer/controller at AAR(s); and

h. the method and frequency of required confirmation reports during and on completion of the exercise.

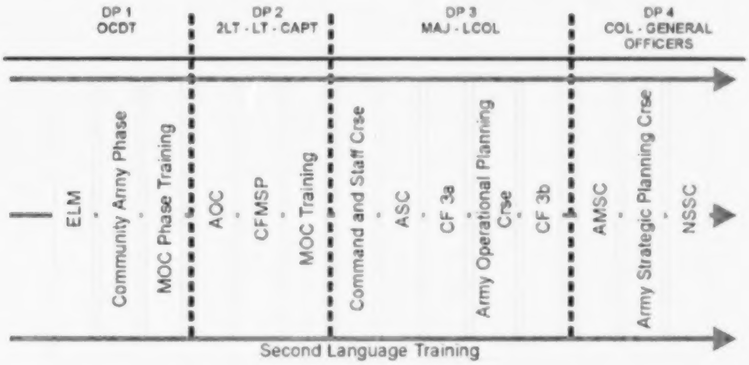
## SECTION 3
## CONCLUSION

18. Confirmation of collective training is critical to the maintenance of common high standards of combat skills throughout Canada's Army. The methodology outlined above is designed to assist commanders at all levels prepare for and conduct effective confirmation. All commanders should employ this methodology when preparing exercise training plans and when tasking units to support training. It is envisioned that the development of a Canadian Manoeuvre Training Centre, utilizing WES, will greatly facilitate confirmation by providing objective measures regarding the effectiveness of a particular tactical grouping when conducting a BTS against a capable enemy. But the principle and methodology of confirmation should also be used in less sophisticated training. It is only through confirmation that the Army can guarantee higher standards of operational readiness while gathering the necessary information to allow for standards validation and efficient combat development.

# ANNEX C
# ARMY PROFESSIONAL DEVELOPMENT

1. Professional development (PD) is the systematic process that transforms a Canadian citizen into a military professional. The system imparts and integrates knowledge and skills unique to military art and science throughout the careers of both officers and soldiers. Once trained and educated, and when combined with employment experience in the military environment and self-development, individuals within Canada's Army will be capable of effectively and efficiently performing their duties.

Proposed Officer Professional Development System



Proposed NCM Professional Development System

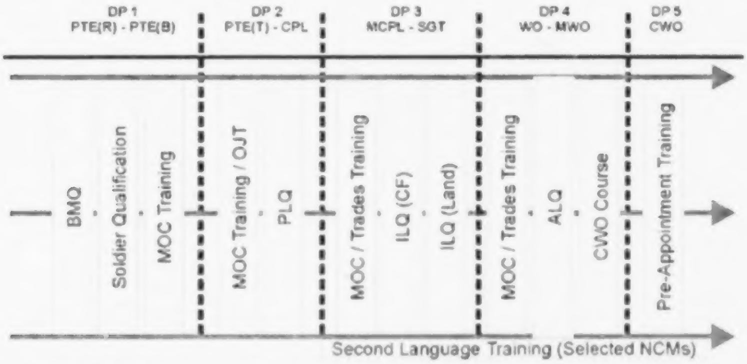


**Figure C-1: Proposed Officer and NCM Professional Development Systems**

2. PD, therefore, supports the mission of, and is intimately connected to the aims of, the Army. The development of the abilities of all officers and soldiers to exercise command, leadership and other military duties in war or operations other than war is the pre-eminent consideration that guides the conduct and evolution of the PD system. As such, the PD systems for officers and soldiers will function as a cohesive, integrated process that encompasses the PD of all members of the CF. The primary goal of this process is that individuals meet, firstly, the

general requirements of membership in the CF, and secondly, the unique requirements of employment in the Army environment and in specific occupations.

3. Individuals will be developed in accordance with the precepts outlined in Chapter 3. In practical terms, individuals can expect to undertake various training events designed to support their PD. Figure C-1 outlines those proposed major individual training events that officers and soldiers will undertake in a given developmental period (DP). This is not, however, the totality of PD an individual can expect to undertake during his career. Employment experience, education and self-development, though not represented in Figure C-1, are nevertheless expected of individual officers and soldiers.

**ELM**: Enhanced Leadership Model

**AOC**: Army Operations Course

**CFMSP**: Canadian Forces Military Studies Programme

**ASC**: Army Staff Course

**AMSC**: Advanced Military Studies Course

**NSSC**: National Security Studies Course

**BMQ**: Basic Military Qualification

**PLQ**: Primary Leadership Qualification

**ILQ**: Intermediate Leadership Qualification

**ALQ**: Advanced Military Qualification

**OJT**: On-job Training

# ANNEX D
# NEEDS ASSESSMENT

## GENERAL

1. The ability of the Army to successfully perform its assigned missions is dependent upon the ability of its teams and individuals to perform at the required level of competence. A problem arises when there is a gap between the required performance level and the actual performance capability. Training is the key to ensure that the required performance levels are attained; however, training is not the solution to every performance problem. There are a number of factors that affect performance. These factors can be grouped into the four main areas: individual, organization, equipment and environment. Table D-1 describes some of these factors. The key point to remember is that training is but one possible solution to the problem of performance gaps.

| AREAS | FACTORS THAT AFFECT PERFORMANCE | POSSIBLE SOLUTIONS |
|---|---|---|
| **Individual** | • Lack of Knowledge<br>• Lack of Skill<br>• Improper Incentives<br>• Lack of Motivation | • Select the right people<br>• Provide appropriate feedback<br>• Provide appropriate incentives<br>• Link individual goals to organizational goals<br>• Provide job aids<br>• Train |
| **Organization** | • Improper Manning Structure<br>• Not Enough People<br>• Wrong People Doing the Job<br>• Regulations/Procedures<br>• Lines of Communication | • Organize to support performance<br>• Select the right people<br>• Change regulations to support performance |
| **Equipment** | • Lack of Equipment/Materiel<br>• Wrong Equipment/Materiel<br>• Equipment/Materiel is Worn<br>• Design Flaw in Equipment<br>• O&M Problems | • Select the "right" equipment<br>• Ensure equipment/materiel is available<br>• Maintain and improve equipment<br>• Train on the equipment you will use |

| AREAS | FACTORS THAT AFFECT PERFORMANCE | POSSIBLE SOLUTIONS |
|---|---|---|
| **Environment (Setting)** | • Time Limits<br>• Physical Limits<br>• Lack of Assistance<br>• Group Dynamics<br>• Hazardous Conditions | • Train as you intend to fight<br>• Ensure all resources are in place<br>• Train as a team |

**Table D-1: Factors that Affect Performance**

## DEFINITIONS

2. Training is often inappropriately selected as an expensive solution to address a performance problem. It is incumbent on everyone involved in the training system to ensure that there is an identifiable and measurable need for training before resources are dedicated to it. The process to analyse a performance problem for potential solutions, which might include training, is called a needs assessment.

3. A needs assessment is the systematic study of a performance problem or innovation incorporating data and opinions from various sources in order to make recommendations or propose valid solutions.[15] A needs assessment is often incorrectly referred to as training needs analysis (TNA); however, it is important to note that a TNA is an analysis that takes place after a needs assessment has selected training as a solution to a performance gap. A TNA is defined as the process necessary to identify training needs and analyse them to determine the strategy to meet those needs in the most efficient and effective manner"

## NEEDS ASSESSMENT MODEL

4. A-P9-050-000/PT-002 *Manual of Individual Training and Education, Volume 2, Needs Assessment* provides detailed information on how to conduct a needs assessment. Table D-2 provides an overview of the process.

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[15] A-P9-050-000/PT-002 *Manual of Individual Training and Education, Volume 2, Needs Assessment*

| PERFORMANCE ANALYSIS | |
|---|---|
| **Determine Purpose** | Meet with OPIs<br>Collect background information<br>Describe scope of the problem and aim of the needs assessment<br>Put the needs assessment into context |
| **Plan the Needs Assessment** | Prepare needs assessment plan to include: background, purpose, scope, methods, activities, evaluation, milestones and funding |
| **Collect Data** | Compile data<br>Analyse results |
| **Identify Required Levels of Performance** | Organizational vision and goals<br>Subject matter experts<br>Mission, job and task analysis |
| **Identify Current Levels of Performance** | Document search<br>Opinion analysis<br>Observation |
| **Identify Problem Areas** | Determine the performance deficiency or "gap" |
| **CAUSE ANALYSIS** | |
| **Identify Cause(s) of the Problem** | Generate a list possible causes<br>Identify probable cause(s)<br>Test to verify selected cause(s) |
| **SOLUTION IDENTIFICATION AND RECOMMENDATION** | |
| **Identify Solution(s)** | Generate alternate solutions<br>Evaluate solutions<br>Select the best solution |

| SELECT AND IMPLEMENT A SOLUTION | |
|---|---|
| **Report Findings and Recommendations** | • Report on findings and conclusions<br>• Make recommendations<br>• Include the implementation plan |
| **CONFIRMATION** | |
| **Confirmation** | • Confirm the implemented solution |

**Table D-2: Model for Needs Assessment**

# ANNEX E
# INSTRUCTIONAL METHODS GUIDELINES

1. For most training programmes, learning/training objectives should be classified as knowledge, skill or attitude. These categories are further refined in Table E-1. This classification assists in the selection of an instructional method that matches the type of objective. Table E-2 provides examples of methods that are appropriate for various types of learning. Table E-3 provides a description and guidelines for various instructional methods.

| CATEGORY | TYPE | EXAMPLES |
|---|---|---|
| Knowledge | Recall | Name the parts of a machine gun. |
| | Comprehension | Explain signal processing in a communication system. |
| Intellectual Skill | Application | Plan a patrol. |
| | Analysis | Produce a Contact Report. |
| | Synthesis | Site a defensive system. |
| | Evaluation | Determine the weak points in a defensive system. |
| Psychomotor Skill | Physical Skills | Perform an engine run-up on LAV III. |
| Attitude | Affective | Exhibit tact and diplomacy during interview. |

**Table E-1: Categories of Learning Outcomes**

| TYPE OF LEARNING | METHODS |
|---|---|
| Recall | Lecture, Demonstration, Self-Study, Game |
| Comprehension | Tutorial, Guided Discussion, Self-Study, Visit |
| Application | Simulation, OJT |
| Analysis | Simulation, Case Study, In-basket Exercise |
| Synthesis | Simulation, Case Study |
| Evaluation | Case Study, Study Assignment |
| Physical Skills | Demonstration, Practice, Simulation, Tutorial |
| Affective | Behaviour Modelling, Guided Discussion, Role Play |

**Table E-2: Matching Methods to Learning Outcomes**

| METHOD | DESCRIPTION | TYPICAL APPLICATIONS |
|---|---|---|
| **Demonstration** | Learners observe the performance of the target task and rehearse it under controlled conditions. | Manual procedures such as operating equipment. |
| **Interactive Lecture** | Learners listen to an oral presentation and participate by asking questions, commenting or responding to instructor questions. | Introducing a subject.<br>Providing an overview.<br>Reviewing teaching points. |
| **Guided Discussion** | Learners discuss issues to share knowledge, opinions and feelings about the subject matter. A facilitator guides and mediates the exchange. | Supplementing lectures.<br>Reinforcement of comprehension of concepts. |
| **Study Assignment** | Learners read prepared material, complete accompanying exercises and receive feedback. | Intellectual skills.<br>Remedial instruction.<br>Make-up exercises for late arrivals.<br>Background material. |
| **Self-Study** | Learners receive instructional materials and work through them independently. Feedback is provided within the instructional package. | Recalling facts.<br>Review and practise.<br>Distance learning. |
| **Game** | A participative and challenging activity for a single participant or a group of learners. Games include conflict, rules and a means for determining a winner or winners. | Practising skills associated with a social system or human interaction. |
| **Simulation** | Learners interact with a simplified and dynamic representation of a system (a simulator is an apparatus built to run a simulation). | Realistic practice with a complex system (physical or social). |
| **In-basket Exercise** | A type of simulation in which learners respond to a variety of memos, directives and messages that re-create a job-specific scenario. Interruptions, emergencies and random events are usually factored into the exercise. | Decision-making.<br>Prioritizing. |

| METHOD | DESCRIPTION | TYPICAL APPLICATIONS |
|---|---|---|
| **Role Play** | Learners play defined roles in a scenario designed to reflect the conditions of the target performance. An observer provides feedback. | Skills associated with a social system or human interaction.<br>Language training.<br>Attitudinal objectives. |
| **Behaviour Modelling** | Learners acquire new behaviours by observing live or video models and then rehearsing the behaviours. | Attitudinal objectives.<br>Interpersonal skills. |
| **Case Study** | Learners respond to the description of a scenario related to the target performance, examining the facts and incidents of the case, to critically analyse them and develop solutions. | Practising the application of concepts and principles. |
| **Tutorial** | Instructor works directly with an individual to ensure the successful completion of learning activities. | Remedial instruction.<br>Highly complex skills. |
| **Visit** | Learners observe actual performance of tasks that were learned in class. | Reinforcement of learning.<br>Provide variety. |
| **On-job Training (OJT)** | Learners receive objectives and guidelines from the training group and are released to the job. Job supervisors monitor their progress and ensure skilled workers are available to provide guidance. | Physical and Intellectual Skills (When other forms of instruction are impractical). |

**Table E-3: Instructional Methods—Guidelines**

# ANNEX F
# INSTRUCTIONAL MEDIA GUIDELINES

## NOTE

This Annex is adapted from A-P9-050-000/PT-004 *Manual of Individual Training and Education Design of Instructional Programmes*.

| MEDIUM | DESCRIPTION | BENEFITS | CONCERNS |
|---|---|---|---|
| **Instructor** | Learning activities are conducted in person, usually in a classroom, lab or other suitably equipped facility. | • Effective when complex interaction between instructors and learners is critical<br>• Effective for highly variable, complex content and for feedback that requires an expert<br>• Accommodates role modelling<br>• Accommodates learner-to-learner interaction<br>• Accommodates lecture, simulations and role plays<br>• Competent instructor can overcome instructional and logistics errors<br>• Accommodates a wide variety of teaching aids | • Tends to ignore needs of slower or faster learners<br>• Risk of reliance on lecture to the detriment of more active learning<br>• Possible lack of consistency among instructors<br>• Uneven instructor delivery can result in uneven performance results across learner populations |
| **Print** | Refers to textual and/or graphical material designed to both transmit content and initiate learning activities. | • May be transmitted on paper or electronically<br>• Excellent for self-paced manuals and documentation<br>• Excellent for graphics<br>• Portable<br>• Relatively inexpensive to produce<br>• Can be widely distributed | • Requires good reading skills<br>• Cannot analyze complex learner responses<br>• Cannot provide precise, individualized feedback<br>• Requires well-motivated learners |

| MEDIUM | DESCRIPTION | BENEFITS | CONCERNS |
|---|---|---|---|
| **Videotape** | Provides sound and moving images in a linear format.<br>Usually more effective when short and produced at commercial quality levels. | • Can be motivational for short periods of time<br>• Effective for overviews and explaining complex messages<br>• Can model complex interpersonal behaviours or visually complex subject matter such as equipment repair | • Rarely a stand-alone medium<br>• Cannot analyze learner responses<br>• Does not allow quick access to specific content items<br>• Development cost for commercial quality video may be high<br>• Not easy to update; best for stable content |
| **Computer Based Training (CBT)** | Instruction delivered through a computer program, including text and graphics, and may run on PCs used in office environments. | • Allows drill and practice<br>• Can provide tutorial<br>• Can present some simulations (model of an object, process or procedure)<br>• Allows practice of high level skills such as problem solving<br>• Consistent delivery<br>• Self paced, any time<br>• May reduce training time over conventional classroom instruction<br>• Can be distributed | • Development can be complex and costly<br>• Cannot analyze or judge complex human interactions<br>• Requires reading skills<br>• Requires computers<br>• High life cycle maintenance costs<br>• Not easy to update; best for stable content<br>• Requires technical support<br>• Requires learner support |

| MEDIUM | DESCRIPTION | BENEFITS | CONCERNS |
|---|---|---|---|
| **Multimedia** | Computer training that includes audio, high level animation and video. | • Same advantages as for CBT<br>• Effective for overviews and explaining complex subject matter<br>• Can model complex interpersonal behaviours or visually complex subject matter (equipment repair)<br>• Accommodates learners with lower reading skills<br>• Offers a greater variety of learning activities and resources than CBT | • Same as for CBT<br>• Requires high end computers with appropriate capabilities and peripherals such as CD-ROM player<br>• Greatly increased development time and costs<br>• High fixed costs<br>• Cannot analyse or judge complex human interactions |
| **Web Based Training (WBT)** | A variation on CBT in which instructional materials are accessed through the Internet or an Intranet. | • Same advantages as CBT<br>• Timely and transparent updates<br>• Wide distribution<br>• No-cost distribution if existing infrastructure is used | • Delivery speed can be slow<br>• May conflict with operational use of Intranet<br>• Access constrained by access to Internet/Intranet |
| **Audio Conference** | Also known as teleconferencing, refers to digital voice-based communications in which participants are linked by telephone. | • Relatively inexpensive and easy to use<br>• Can permit real time instructor/learner and learner/learner interaction<br>• Good supplement to other forms of instruction<br>• Useful when discussion and consensus building is part of the instructional strategy | • Instructor and learners cannot see each other<br>• No visuals (unless pre-packaged and distributed)<br>• Scheduling over time zones may be difficult |

| MEDIUM | DESCRIPTION | BENEFITS | CONCERNS |
|---|---|---|---|
| **Video Conference** | Refers to the transmission of video and voice by television signal. Can be one-way or two-way. | • Two-way mode comes as close as possible to face-to-face in a distance setting<br>• Realistic presentations of people objects and processes<br>• Can be used for consulting and coaching | • Risk of learners avoiding participation<br>• Interaction can be restricted by technical aspects<br>• Infrastructure, hardware and technical support requirements result in high start-up costs<br>• Two-way transmission limited to a small number of sites and participants |
| **Computer Conference** | A teleconferencing technology that supports computer-based textual communications, including e-mail; may be either synchronous or asynchronous, widely used in education. | • Combines the discipline of writing with the flexibility of conversation<br>• Powerful tool for group communication and co-operative learning across distance<br>• Maintains written records<br>• Can accommodate input from "visiting" experts that would be otherwise impossible | • Requires computer and Internet access<br>• Requires common software<br>• Requires facilitation and management by experts |
| **Audio** | A teleconferencing technology that supports two-way transmission of graphics and audio in real time using personal computers. | • Suited to instruction that contains a lot of illustrations or notational information<br>• Maintains written record | • Instructor and learners cannot see each other<br>• Infrastructure, hardware and technical support requirements result in high start-up costs<br>• Scheduling over time zones may be difficult |

| MEDIUM | DESCRIPTION | BENEFITS | CONCERNS |
|---|---|---|---|
| **Simulator** | A special purpose device that allows the learner to interact in a realistic manner with a dynamic representation of a system. | • Provides realistic practice<br>• Avoids risks to learner, environment, equipment, public<br>• Provides physical and system feedback<br>• Can capture information for instructional feedback<br>• Can have jump, freeze, record, replay capabilities<br>• Can provide high physical fidelity and sufficient system fidelity for instruction at a fraction of the cost of real equipment | • Not a stand-alone medium: requires instructional overlay<br>• Usually requires expert feedback from instructor<br>• Requires hardware, software and simulation maintenance<br>• May require specialised facilities |
| **Real Equipment** | Refers to the use of actual equipment such as weapons, vehicles and combat systems for training. | • Full physical fidelity<br>• Full system fidelity | • Not a stand-alone medium: requires expert instructors for feedback<br>• High maintenance costs<br>• Difficult to incorporate instructional features without modification<br>• High fixed cost in most cases<br>• Only capable of low throughputs<br>• Difficult to schedule if weather and availability are issues |
| **Models/**<br>**Mock Ups /**<br>**Cut Aways** | Three dimensional devices that represent real equipment. | • Presents a three dimensional view<br>• Can provide hands on practice | • Not a stand-alone medium: requires presentation and explanation by instructor<br>• Requires interaction and feedback by instructor<br>• Static representation |

# ANNEX G
# RANGES AND TRAINING AREAS

## RANGE AND TRAINING REQUIREMENTS

1. A rough rule of thumb is that unit and formation sectors are usually twice as long as they are wide. Traditional representative widths (frontage) are provided in Table G-1. These widths are expected to significantly increase in the near future.

| SERIAL | ORGANIZATION | FRONTAGE |
|---|---|---|
| **(a)** | **(b)** | **(c)** |
| 1 | COMBAT TEAM | 2 TO 5 KILOMETRES |
| 2 | BATTLE GROUP | 4 TO 10 KILOMETRES |
| 3 | BRIGADE | 8 TO 20 KILOMETRES |
| 4 | DIVISION | 16 TO 40 KILOMETRES |

**Table G-1: Representative Widths**

2. To quantify general training real-estate requirements, it is necessary to make a number of assumptions. The following assumptions are based on best military judgement and using gently rolling, partly wooded terrain:

a. a delaying operation will normally require the maximum frontage and twice that in depth;

b. an advance to contact will normally require the same amount of land as the delay;

c. a defensive operation will normally require the minimum frontage and twice that in depth;

d. a deliberate attack will normally require fifty percent more land than the defence; and

e. there is normally a fifty percent overlap in the use of ground (i.e., half of the ground used for one operation of war will be used for the following one; so, the total land requirement is less than the sum of the component operations of war).

3. The Tables below provide a summary of training real-estate requirements resulting from these assumptions. The figures are in hectares; however, the training area dimensions in kilometres are also provided in brackets.

| SIZE | TOTAL | DELAY | DEFENCE | DELIBERATE ATTACK | ADVANCE TO CONTACT |
|---|---|---|---|---|---|
| (a) | (b) | (c) | (d) | (e) | (f) |
| Combat Team | 6,300<br>(5x12.6) | 5,000<br>(5x10) | 800<br>(2x4) | 1,800<br>(3x6) | 5,000<br>(5x10) |
| Battle Group | 24,600<br>(10x24.6) | 20,000<br>(10x20) | 3,200<br>(4x8) | 6,000<br>(6x10) | 20,000<br>(10x20) |
| Mechanized Brigade | 101,600<br>(20x50.8) | 80,000<br>(20x40) | 14,400<br>(8x16) | 28,000<br>(12x24) | 80,000<br>(20x40) |

**Table G-2: Summary of Terrain Requirements**

| RANGE CRITERIA | CATEGORY 1 RANGES | CATEGORY 2 RANGES |
|---|---|---|
| (a) | (b) | (c) |
| Training Level | Levels 1 and 2<br>Small arms training, including sub-calibre for anti-tank | Levels 2,3,4 and 5<br>Special to corps individual training and collective live fire training |
| Conducting Headquarters | Platoon/Company — Troop/Squadron | Battalion/Regiment/School |
| Size | As required for Danger Area Template IAW B-GL-381-001/TS-000 *Training Safety* | As required for Danger Area Template IAW B-GL-381-001/TS-000 *Training Safety* |
| Location | As required by users at discretion of the area commander | -National Schools<br>-Area Battle Schools<br>-Militia Training Support Centres |
| Facilities | Small arms ranges<br>Grenade range<br>**(No Unexploded Ordnance allowed to be left on the ground)** | Static ranges and battle runs for large calibre weapons<br>**(Unexploded Ordnance tolerated in designated impact areas as per Range Standing Orders)** |

**Table G-3: Summary of Range Criteria**

| TRAINING AREA CRITERIA | CATEGORY A | CATEGORY B | CATEGORY C | CATEGORY D |
|---|---|---|---|---|
| (a) | (b) | (c) | (d) | (e) |
| Training Level | Level 1,2 and 3<br>Individual<br>Section<br>Platoon/Troop | Level 4 and 5<br>Company/Squadron<br>Combat Team | Level 6<br>Battle Group | Level 7<br>Brigade Group |
| Conducting Headquarters | Platoon/Troop<br>Company/ Squadron | Battalion/Regiment<br>Battle Group<br>Area Battle Schools | Brigade<br>Combat Training Centre | Division/<br>Task Force |
| Size of Manoeuvre Area | 800 Hectares | 5,000 Hectares | 20,000 Hectares | 80,000 Hectares |
| Description | To include areas for fieldcraft, battlecraft, and driver training | Dry training area for combat team plus impact areas for some direct and indirect fire weapons | Dry training area for battle group plus impact areas for company/ squadron live fire exercises | Dry training area for brigade or task force plus impact areas for battle group live fire exercises |
| Examples | Pussey Hill, Estrie, Vernon | Meaford, Petawawa and Valcartier have 3000 usable hectares | Gagetown, Shilo, Wainwright | Suffield |

**Table G-4: Summary of Training Area Criteria**

| TRAINING AREA | TOTAL (Hectares) | CLEAN (Hectares) | DIRTY (Hectares) | MANOEUVRE (Hectares) |
|---|---|---|---|---|
| (a) | (b) | (c) | (d) | (e) |
| WAINWRIGHT | 60 500 | 37 000 | 17 000 | 50 000 |
| DUNDURN | 23 000 | 14 500 | 6 000 | 20 000 |
| PETAWAWA | 20 800 | 4 000 | 16 000 | 3 000 |
| MEAFORD | 7 100 | 3 000 | 4 000 | 3 000 |
| VALCARTIER | 21 000 | 12 500 | 6 000 | 3 000 |
| GAGETOWN | 109 400 | 90 000 | 20 000 | 20 000 |
| SUB-TOTAL | 241 800 | 161 000 | 69 000 | 99 000 |
|  |  | 66.6% | 28.5% | 40.1% |
| *SUFFIELD* | *269 000* |  |  | *225 000* |
| *SHILO* | *39 500* |  |  | *36 000* |

**Table G-5: Summary of Training Area Inventory**

# ANNEX H
# LAW OF ARMED CONFLICT TRAINING AND RULES OF ENGAGEMENT [16]

## BACKGROUND

1. Under international and Canadian law, and pursuant to national policy, the Canadian Government has committed its armed forces to conduct its operations in accordance with the Law of Armed Conflict (LOAC). This commitment legally, morally and professionally obliges each member of Canada's Army to fully comply and to ensure full compliance with all the international treaties and customary law related to the Law of Armed Conflict. The chain of command will be held responsible for ensuring that soldiers are effectively trained in the Law of Armed Conflict. The Law of Armed Conflict is traditionally divided into two components: the Law of the Hague, which governs the conduct, means and methods of conducting military operations, and the Law of Geneva, which is concerned with the protection of persons not involved in the conflict. The Law of Armed Conflict is not to be confused with rules of engagement (ROE). ROE are the method by which military commanders control the use of force. The Law of Armed Conflict is one of the factors that influence ROE. Whereas the Law of Armed Conflict is a constant across the spectrum of conflict, ROE will change. Soldiers poorly trained in the Law of Armed Conflict will be legally liable for their violations and can bring dishonour to the Army and ultimately Canada.

## CODE OF CONDUCT

2. Canada's Army is committed to ensuring that its soldiers fully understand and comply with the Law of Armed Conflict. This understanding and compliance can only be achieved through effective training and indoctrination prior to operations. The CF Code of Conduct is an essential part of such training and indoctrination. The CF Code of Conduct[17] is a simple and understandable code, which is universal in its application. When followed, the CF Code of Conduct will ensure that soldiers and officers carry out their duties in accordance with the spirit and principles of the Law of Armed Conflict. The following eleven rules constitute the CF Code of Conduct:

a. Engage only opposing forces and military objectives.

b. In accomplishing the mission, use only the necessary force that causes the least amount of collateral civilian damage.

c. Do not alter weapons or ammunition to increase suffering or use unauthorized weapons or ammunition.

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[16] B-GG-005-027/AF-020 *The Law of Armed Conflict at the Operational and Tactical Level*, January 1999.

[17] *Code of Conduct for CF personnel*, Office of the JAG, 1998 edition.

d. Treat all civilians humanely and respect civilian property.

e. Do not attack those who surrender. Disarm and detain them.

f. Treat all detained persons humanely in accordance with the standard set by the third Geneva Convention. Any form of abuse is prohibited.

g. Collect all the wounded and sick and provide them with the treatment required by their condition, whether friend or foe.

h. Looting is prohibited.

i. Respect all cultural objects and places of worship.

j. Respect all persons and objects bearing the Red Cross/Crescent and other recognized symbols of humanitarian agencies.

k. Report and take appropriate steps to stop breaches of the Law of Armed Conflict and these rules. Disobedience of the Law of Armed Conflict is a crime.

## TRAINING GUIDELINES

3. The following principles will be applied in designing and conducting training in the Law of Armed Conflict:

a. Law of Armed Conflict training will cover both the Geneva Law and the Hague Law.

b. Training on the Law of Armed Conflict in the Army will normally be conducted by instructors who have familiarization training in the Law of Armed Conflict; however, as training progresses up the chain of command, the responsibility will be increasingly shared with legal officers.

c. Law of Armed Conflict training will ensure that all Army personnel fully understand that the Law of Armed Conflict is applicable to all future operations across the spectrum of conflict. As such, the Law of Armed Conflict is to be incorporated into all aspects of training to ensure that it is embedded in the ethos and culture of the Army.

## RESPONSIBILITIES

4. Law of Armed Conflict training is the responsibility of the chain of command. All commissioned and non-commissioned officers within the Army are trainers and are, therefore, responsible for understanding the Law of Armed Conflict appropriate to their rank level. Legal officers will advise and assist in the development and conduct of training where appropriate, but the actual training in the Law of Armed Conflict, especially at the lower levels, is the responsibility of commanders and instructors.

5. Commanders at all levels in the chain of command must ensure that the Law of Armed Conflict is integrated into all training activities to ensure full compliance with Law of Armed Conflict. The Law of Armed Conflict must be an integral part of all after action reviews (AARs) to ensure that lessons learned are applied.

## RULES OF ENGAGEMENT TRAINING

6. ROE are directives issued by military authority. The chain of command must ensure adequate training time is available for teaching, training and testing ROE. Generic ROE have been included in the Army SOPs[18] and must be integrated into all training activities. All commissioned and non-commissioned officers within the Army are responsible to understand ROE and their applications appropriate to their rank level. We must remember that ROE are lawful orders and are not merely guidelines.[19]

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[18] B-GL-332-001/FP-001, USOP 109 and B-GL-333-001/FP-001, FSOP 108.

[19] B-GL-300-000/FP-000 *Canada's Army*, page 99.

## ANNEX I
## THE TRAINING LEXICON: ABBREVIATION INDEX

| | |
|---|---|
| **AAR** | After Action Review |
| **ASAT** | Army Systems Approach to Training |
| **BTS** | Battle Task Standards |
| **CAX** | Computer Assisted Exercise |
| **CBT** | Computer Based Training |
| **CCSO** | Command Chief Standards Officer |
| **CFITES** | Canadian Forces Individual Training and Education System |
| **CoE** | Centre of Excellence |
| **CPX** | Command Post Exercise |
| **CRR** | Course Review Reports |
| **DP** | Developmental Period |
| **ELOC** | Essential Level of Capability |
| **FTX** | Field Training Exercise |
| **IBTS** | Individual Battle Task Standards |
| **LES** | Land Environmental Specifications |
| **LFDTS** | Land Force Doctrine and Training System |
| **LOAC** | Law of Armed Conflict |
| **LOC** | Level of Capability |
| **MLOC** | Minimum Level of Capability |
| **NCMGS** | Non-commissioned Member General Specifications |
| **NCMPDS** | Non-commissioned Member Professional Development System |
| **OA** | Occupational Analysis |
| **OGS** | Officer General Specifications |

| | |
|---|---|
| **OJT** | On job Training |
| **OPDS** | Officer Professional Development System |
| **OOTW** | Operations Other Than War |
| **OPFOR** | Opposition Force |
| **OS** | Occupation Specification |
| **OSS** | Occupation Specialty Specification |
| **PD** | Professional Development |
| **POR** | Post Operation Report |
| **PXR** | Post Exercise Report |
| **QS** | Qualification Standard |
| **ROE** | Rules of Engagement |
| **RUE** | Reciprocal Unit Exchanges |
| **SPQR** | Special Personnel Qualification Requirements |
| **SORD** | Strategic Operations and Resource Direction |
| **SUE** | Small Unit Exchanges |
| **TEWT** | Tactical Exercise Without Troops |
| **TMST** | Theatre and Mission-specific Training |
| **TP** | Training Plan |
| **TTP** | Tactics, Techniques and Procedures |
| **UQL** | Unit Qualification List |
| **WBT** | Web Based Training |
| **WES** | Weapons Effects Simulation |
| **GS** | General Specification |
| **EO** | Enabling objective |
| **SORP** | Strategic Operations and Resources Plan |

## THE TRAINING LEXICON: KEY CONCEPTS

1. **Adventure Training**. A type of collective training that does not correspond to specific battle task standards but provides considerable benefit for sub-units, sub-sub-units or smaller groupings. Adventure training is an excellent tool for fostering self-confidence, leadership and team cohesion.

2. **Army Systems Approach to Training (ASAT)**. The Army's training management model based on the Canadian Forces Individual Training and Education System (CFITES). ASAT is governed by three principles: all training is performance orientated; training is defined, developed and delivered in a systematic approach; training is developed and delivered in a manner that achieves optimum efficiency. So that ASAT can fulfil these principles, six distinct phases act as the quality control process. These phases are analysis, design, development, conduct, evaluation and validation. Responsibility for ASAT rests with the Commander Land Force Doctrine and Training System (LFDTS), but the execution of the ASAT resides at the strategic, operational and tactical levels as defined by the system.

3. **Battle Task Standards (BTS)**. A collective training performance objective that provides an operational measure against which the effectiveness and efficiency of collective training can be gauged. BTS "actualize" military doctrine in that they define and break doctrine down into performance requirements that a particular unit will have to achieve.

4. **Canadian Forces Individual Training and Education System (CFITES)**. A management system designed to enhance the quality and quantity of training and education throughout the Armed Forces, while husbanding the resources dedicated to training and education programmes.

5. **Canadian Forces Military Training Assistance Programme (MTAP)**. The programme that administers NATO's Partnership for Peace programme in Canada.

6. **Collective Battle Task Standards Training**. Training that converts individual soldiers possessing individual battle skills into a cohesive, combat-capable unit.

7. **Collective Training**. Training that focuses on producing cohesive, combat-capable tactical groupings and involves the simulated execution of battle tasks in realistic training scenarios.

8. **Combined Exercise**. An exercise that is planned and conducted by one or more components of the CF in combination with forces from one or more allied nations to accomplish a single mission.

9. **Command Post Exercise (CPX)**. An exercise involving the commander, his staff and communications within and between headquarters but in which the forces are simulated.

10. **Computer Assisted Exercise (CAX)**. An exercise based on the use of computer technology to create constructive simulation.

11. **Computer Based Training (CBT)**. Lesson instruction delivered through a computer program. CBT includes text and graphics and may run on personal computers used in an office environment.

12. **Continuation Training**. Training that practises individual and collective skills in order to prevent the erosion of skills not regularly practised at higher levels in the progression of training.

13. **Confirmation**. A formal check whereby the trainee, be that an individual or unit, passes through a "gateway" to the next higher training level or to a more advanced readiness state. Confirmation follows progressive preliminary training and a practice period. In order to be valid, confirmation requires a clearly understood and relevant set of standards, a methodology, the appropriate personnel and tools, and an analysis by a confirming commander. Two types of confirmation exist: formal and informal.

14. **Essential Components of Qualification Standards/Battle Task Standards (QS/BTS)**. Tasks and knowledge required by Army Reservists to perform their occupational duties on Class A service or on domestic operations. Resource limitations must be considered in the determination of essential training.

15. **Essential Level of Capability (ELOC)**. A minimum level of competency required in the Reserve Force for Class A service. It ensures the capability of the Reserve Force to augment the Regular Force (up to sub-unit strength) for operations in Mobilization Stages 1 and 2 or for expansion in Mobilization Stages 3 and 4. It comprises the essential components of QS and BTS (up to level 4). It is the basis upon which supplemental QS and BTS training is conducted in order to achieve the minimum level of capability (MLOC) standard.

16. **Fitness Training**. A type of training that is considered both individual and collective training. An integral part of the military profession, fitness training both strengthens the individual's ability to deal with the physical and mental demands of military operations and is an excellent vehicle for the creation of team cohesion and esprit de corps.

17. **Force Generation Cycle**. A cyclical model by which the Army creates, sustains and utilizes effective combat-capable forces. The Force Generation Cycle is a three-phase model, comprising the Support, the Training and the Operations Phase. Each phase is distinct in that the task of a force in a given phase is specific and prescribed to it so as to ensure continuity and consistency within the cycle.

18. **High Readiness**. A unit with 100 % manning of establishment, 95 % holdings of equipment entitlement and requiring 30 days (or less) notice to move for deployment, dependent upon level of capability (LOC) and level of training achieved, personnel screenings and equipment serviceability requirements, and the need to complete theatre and mission-specific training (TMST) within the allotted notice to move timing.

19. **Individual Battle Task Training**. Training that imparts the common knowledge and skills and the ability to perform those common tasks required by every soldier to ensure combat survival and individual contribution to mission success.

20. **Individual Training**. Training that prepares an individual to fulfil his individual role on operations as a part of a team or group. It comprises formal institutional individual training and professional development.

21. **Joint Exercise**. An exercise that is planned and conducted by elements of two or more environments of the CF. When all environments are not involved, the participating forces are identified.

22. **Level of Capability (LOC)**. A measurable level of competence in war fighting that reflects a collective achievement and maintenance of a specific set of qualification standards and battle task standards. It is the minimum standard of performance deemed necessary to allow forces to progress to more advanced training or operations. Two distinct levels of capability exist: essential level of capability (ELOC) and minimum level of capability (MLOC).

23. **Levels of Training**. In accordance with the principle of progressive training, seven distinct levels of training, each with its own set of collective battle task standards, exists. Higher levels of training are dependent upon the successful completion of lower level training.

24. **Major Exercise**. An exercise programmed by NDHQ in conformity with the CDS's operational guidance to commanders. Depending on the CDS's requirements, responsibility for the planning and conduct of a major exercise may either be assigned to an NDHQ directed exercise planning team or devolved to a subordinate HQ. A major exercise is usually balanced in terms of involvement of the components; although, for certain exercises, the balance may exist between two components, with the third having a lesser involvement.

25. **Minimum Level of Capability (MLOC)**. A minimum level of competency required for the commitment of forces to combat operations. It is measured by using the Levels of Training 1-7. MLOC comprises the essential and the supplemental components of qualification standards (QS) and battle task standards (BTS).

26. **Minor Exercise**. An exercise which is programmed, planned, conducted, evaluated and reported on by the formation which may be responsible for deploying as an operational level task force headquarters (TFHQ), with the assistance of, and in conjunction with, other appropriate HQs.

27. **Mobilization**. The process by which the Army generates combat-capable forces. Mobilization is a four stage process; each stage corresponds to a specific level of readiness, reserve involvement and force generation.

28. **Normal Readiness**. A unit with no less than 90 % of establishment strength and at least 85 % of equipment entitlement, requiring 30-180 days to deploy, dependent upon the level of capability (LOC), level of training, personnel screenings and equipment serviceability requirements for deployment.

29. **Observer/Controller**. An experienced soldier who accompanies tactical organizations in training in order to assist them in identifying successful and unsuccessful training events. To achieve their aim in promoting learning in a given organization, the observer/controller will utilize the after action review (AAR) process. The use of this process induces learning through

reference to how the observed performance compared to written battle task standards (BTS) and sanctioned doctrine.

30. **Operations Phase**. A phase in the Force Generation Cycle. At this time, the unit is considered combat capable, but not deployable until it has received theatre and mission-specific training (TMST). The unit is considered at high readiness and, with the requisite TMST, will be operationally ready to meet the commitments assigned to it in the Strategic Operations and Resource Direction (SORD).

31. **Operational Readiness**. The military ability to make a timely and appropriate military response to any threat. A pivotal requirement is that operational readiness must be measurable. There exist several performance indicators that determine operational readiness. The training indicators to be used are the levels of training, the levels of capability (LOC) and theatre and mission-specific training (TMST).

32. **Professional Development (PD)**. The systematic process in which military skill and knowledge are imparted to and inculcated in an individual. The professional body of knowledge that is the cornerstone of the military profession underpins PD. PD occurs through training, education, experience and self-development.

33. **Qualification Standard (QS)**. The articulation of the measurable performance standard that is required of individuals. A QS is determined through a needs assessment performed on a given specification.

34. **Qualification Standards Training**. A component of the individual training system. QS training seeks to provide the required number of trained soldiers and officers to maintain established manning and qualification levels in Army units. This is achieved by imparting new skills, knowledge and attitudes to individuals so that they may competently execute their military duties.

35. **Reduced Readiness**. A unit with low personnel strengths (less than 90% of establishment) and low equipment holdings (less than 85% of entitlement) requiring 180 days (or more) of preparation and training to deploy on overseas operations. Such units, however, must retain a capability to respond to domestic operations emergencies.

36. **Reserve Supplemental or "Delta" Training**. Essentially, the difference in training requirements between essential level of capability (ELOC) and minimum level of capability (MLOC). Delta training represents the training differential that exists between the Reserve and Regular Force components of the Army. The Reserve normally trains to the essential level of each qualification standard (QS) and battle task standard (BTS) but not to the supplemental or residual levels. If Reservists are required for augmentation to the Regular Force, the supplemental levels of selected QS and BTS must be addressed as a supplemental or delta training package.

37. **Reciprocal Unit Exchange (RUE) and Small Unit Exchange (SUE) Training**. A form of collective training. Although this training does not always conform to collective battle task standards (BTS) requirements, as dictated by the Strategic Operations and Resource Direction (SORD), the benefits are substantial for both the individual involved and the Army as a whole.

38. **Residual Components of Qualification Standards (QS) and Battle Task Standards (BTS)**. Tasks and knowledge not included in essential or supplemental training that may be required by a Reservist only on component transfer to the Regular Force.

39. **Self-Development Training**. A component of professional development, this training revolves around the independent efforts of the individual to further his own intellectual and character growth through participation in military and non-military training and education opportunities.

40. **Self-Study**. A type of learning methodology where the learner receives the instructional material and works through it independently. Feedback is provided to the learner as a part of the instructional package.

41. **Simulation**. An instructional method that allows the learner to interact, in a realistic manner, with a dynamic representation of the system being trained.

42. **Specifications**. "Job descriptions" that outline the tasks, skill and knowledge required by each individual to ensure that he possesses the ability to contribute to the performance of the Army and the CF. General specifications describe common CF requirements, land specifications describe common Army requirements, and occupation specifications describe the requirements of a particular occupation.

43. **Supplemental Components of Qualification Standards (QS) and Battle Task Standards (BTS)**. Tasks and knowledge not essential for Class A service, specific components of which may be required by a Reservist to perform occupational duties when employed full time. These components will form the basis of training that may be required before commencing full-time employment (i.e., delta training).

44. **Support/Reconstitution Phase**. A phase in the Force Generation Cycle. It is a time period in which units recuperate after operations or having completed the Operations Phase of the Force Generation Cycle. During this phase, units will be affected by high personnel turnover due to postings, individual career training courses, individual augmentation, and recruit and new equipment intake.

45. **Theatre and Mission-specific Training (TMST)**. Training which is directed towards specific mission requirements and not usually covered in the Training Phase of the Force Generation Cycle. It will usually include qualification standards (QS) and battle task standards (BTS) training that needs reiteration or practice under conditions relative to the specific mission as well as rules of engagement (ROE) training, environmental survival skills and non-combat skills such as negotiation and languages. This type of training, while separate from the minimum level of capability (MLOC) training in the Training Phase, is required for a unit to be considered operationally ready for deployment.

46. **Training Phase**. A phase in the Force Generation Cycle. During this phase, units will undergo progressive training so that they may be confirmed as combat capable before entering the Operations Phase.

47. **Unit Personnel Development Training**. An informal, but essential, component of professional education and training. While qualification standards (QS) training provides the framework upon which all military activities are structured, unit personnel development training expands upon and rounds out that foundation in order to create the consummate military professional. Examples of unit personnel development training include classes on moral issues, communications, military history and collective command and staff training.

48. **Web Based Training (WBT)**. A variant of computer based training. Lessons and instructional material are accessed through the Internet or an Intranet.

# BIBLIOGRAPHY

B-GL-300-000/FP-000 *Canada's Army: We Stand on Guard for Thee*

B-GL-300-003/FP-000 *Land Force, Volume 3, Command*

B-GL-304-001/PT-001 *Training for War*

A-P9-050-000/PT-004 *Manual of Individual Training and Education, Volume 4, Design of Instructional Programmes*

The Land Force Strategic Direction and Guidance 1998—Parts I, II and III

ADM (PER) NDHQ Instruction 4/94, Individual Training and Professional Development Management Framework, 31 May 1994

ADM (PER) Interim Strategic Guidance—Individual Training/Professional Development, 19 August 1994

B-GG-005-027/AF-020 *The LOAC at the Operational and Tactical Level*

B-GG-005-004/AF-000 *Canadian Forces Operations*

*Code of Conduct for CF Personnel*, Office of the JAG 1998 Edition

Defence Plan

DGD&D/18/34/65 Army Training Publication, Volume 4, *Training* ( UK )

MCRP 3-0B *How to Conduct Training* (US Marine Corps)

FM 25-101 *Training the Force, Battle Focused Training* (US Army)

Gagne, R.M. and, K.L. Medsker. *The Conditions of Learning: Training Applications*. Orlando, Florida: Harcourt Brace, 1996.